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ABSTRACT

Food advertising and its effects on children are discussed in this document petitioning the Federal Trade Commission (FTC) to amend a proposed rule on food promotion for the benefit of children under twelve. Extensive information is presented on television food commercials and their influence on children's nutritional beliefs and eating habits. The FTC's responsibility to protect children in commercial situations is emphasized, with suggestions given as to how the proposed amendments could be implemented within the framework of prevailing practices. It is claimed that the repeated advertising of food to children without factual nutritional information, particularly on the calorie-nutrient relationship, constitutes an unfair and deceptive act. It is proposed that, with proper research, the food industry could find the means, perhaps in graphic form, of revealing nutritional worth while promoting food products. A behavioral study on a sample graphic showed that children at various age levels were able to learn to comprehend the complex relationship of calories and nutrients and to use both these dimensions in evaluating foods. Included in the document are specific technical recommendations to the FTC for carrying out goals and views expressed. Appendices present extensive data on food advertising and children's television viewing patterns, as well as a brief description of children's cognitive development and the influence of television on it. Samples of current advertising and experimental graphics are included. (BF)

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TO THE FEDERAL TRADE COMMISSION
IN THE MATTER OF
A TRADE REGULATION RULE
ON FOOD/NUTRITION ADVERTISING

William D. Dixon, Presiding Officer

October 1976

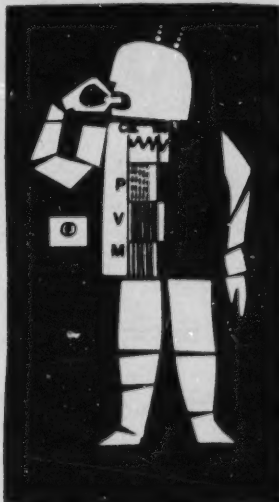
Submitted by

Council on Children, Media and Merchandising
1346 Connecticut Avenue
Washington, D. C. 20036
202/466-2583

Robert B. Choate, Chairman

Introducing

The Nutritional Graphic Preliminary Investigation
of N. D. Feshbach, T.S. Jordan and A. S. Dillman*



In Memoriam

Judith A. Cooke

"She was, of course, dedicated to obtaining [this] rule, and it is clear that without her efforts it would never have been considered, much less drafted."

P. B. Hutt, December, 1973

U.S. DEPARTMENT OF HEALTH,
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SUMMARY

The Council on Children, Media and Merchandising asks the Federal Trade Commission (FTC) to amend the proposed Rule to clarify the Rule to benefit children under twelve. The Council points out: approximately 40 million children under twelve are affected by television advertising of foods and beverages; a typical television watching child is potentially exposed to between 8,500 and 13,000 such commercials each year; there is ample evidence sponsors and advertising agencies actively seek out the young audience; there is ample behavioral science evidence that such messages impact on and inculcate in children certain attitudes toward foods; most such messages contain little nutritional and caloric information; children thus are left uneducated and vulnerable in a field directly related to their health; and children influence food selection. The Council goes on to show that the FTC has a proven responsibility to protect children in such commercial situations, and that the proposed Rule amendments can be adopted and implemented within prevailing commercial practices. The Council then reports on new behavioral research which shows how a sample

nutritional graphic successfully communicates four points of nutritional information to young children, and that they remember it. The Council includes descriptions of how this can be merged into present television food advertising and thus hopefully upgrade food selection processes at school, in the store and at home, bringing nutritional benefits to the entire family.

INTRODUCTION

My name is Robert Choate, I am chairman of the Council on Children, Media and Merchandising, (CCMM) a group of citizens interested in the role of the child in the marketplace. The Council advises me on issues which arise in which children's rights are involved.

I appear with FTC funding from the Moss-Magnuson amendments. I have used those funds to strengthen the role of children in the FTC's pending Trade Regulation Rule (TRR) on Food/Nutrition advertising. Child oriented comments thus already have been heard from nineteen witnesses in hearings in San Francisco, Chicago and Dallas (Appendix A). More, no doubt, will be heard in Washington.

The issue here is food advertising and the possible benefits to be derived from altering certain patterns of food promotion. The goal is improved nutritional awareness in the public--including children. We will prove children are prime receivers of food advertisements--most of it occurring through the medium of television -- and will urge that the TRR afford children certain protections, inasmuch as the child is particularly vulnerable to food commercial persuasions, and establishes food habits at an early age. There are over 40 million children under 12 in the United States.

We come to the FTC as a last resort. We believe in privately enacted standards of business conduct, openly administered. To this end I have interacted for nine years with food companies, for six years with broadcasters, and perhaps six years with advertising

agencies. For example, in 1967 I asked 75 major food company leaders what should be done about hunger and malnutrition in this country. Thirty-five responded; six gave it substantial thought. On February 15, 1971, the Council (CCMM) proposed a Code for Advertising Edibles. This was followed by requests for comments to 125 food companies, 25 advertising agencies and 85 broadcasters, as well as to a large number of laymen, consumers, professionals and other television watchers. The business responses were diverse but evidenced no zeal for reform. On May 26, 1971, I made a formal petition to the National Association of Broadcasters Television Review Board and asked that they adopt a private Code for Advertising Edibles. ^{1/} Six months later they turned us down--cold.

We have tried to remain in constant contact with the private sector in seeking these reforms of advertising (see Appendix B); it has resulted in a few compromises, little reform, and much lost time. Convinced the private sector will not reform food advertising, we now turn to the Federal Trade Commission.

I am not a food technologist, nor a nutritionist; neither am I a behavioral scientist, professional advertiser or lawyer. But through a series of fortunate exposures to top professionals in all these fields over the past 15 years, I have accumulated some understanding of food merchandising in our country, particularly to the young. (See Appendix B) I am constantly reminded of the dangers of overlooking the special perspectives of the child as we engage that child in the marketplace. I do talk to many children; my four associates, my children, are invaluable advisors.

In its promulgation of this Food/ Nutrition Rule the FTC has chosen to separate the issues into three phases--phases that may make legal analysis easier but do not facilitate analysis from the consumer nutrition education perspective. § 437.8 of Phase One does invite our attention, however, for children's perception of energy claims may be very different from that of adults, both now and with reforms outlined in the proposed Rule.

We feel that many children over six understand the word "energy" as a capability to do exercise, work or play. The word "calorie" is far less familiar. Even with the frequent use of the term suggested in the Rule, children will have no concept of how to make use of it. For children, "calorie" is a critically important piece of information, but not enough. More calories may sound like more physical energy, and hence sound attractive. Caloric information is important but, for a child, it is only one step forward. And television advertising must complete the process, for children generally see only this medium. Adults, getting nutrition information through other media as well, are less liable to be misled. Hence we approve of § 437.8 as written from an adult standpoint.

To provide children with a useful interpretation of the word calories, and to consider what impact it will make on them, we believe a food's calories expressed as part of the day's caloric needs would be far more meaningful. In the research detailed later in this paper we started out on this line of reasoning.

Children, being children, have a further need. If led to believe calories are the only basis upon which to judge food, children will think all 100 calorie servings of various foods are equally beneficial. This, for a child, would be deceptive.

We thus feel pressed to introduce the concept of nutrients,

which the FTC has put off for consideration to Phase II. We are not the first to mention nutrients in these hearings. Perhaps twenty witnesses have mentioned them, often in the context of nutrient density, which is how we regard them.

We will restrict our observance of the need for a caloric-nutrient expression to just that, and not go into any detail on which protein, vitamins or minerals should be included. We introduce this concept to reduce the possibility of calorie deception of children--that calories alone are the nutritional basis upon which to judge foods. We will augment these remarks in Phase II, but dare not wait until Phase II to tie caloric identification to nutrient worth.

We therefore will focus on § 437.8; at the same time our remarks can be applied to the total Rule, no matter which phase is under discussion.

We ask that the FTC amend the proposed rule so that its goals will beneficially affect children as well as adults. We advocate this by seeking answers to the following questions:

- A. Are children's nutritional beliefs and eating habits influenced by food advertisements?
- B. Are they physically vulnerable* from a public health perspective?
- C. Are they mentally vulnerable in their behavioral development?

* This term came into frequent use during the White House Conference on Food, Nutrition and Health. It refers to specific groups and specific food-related problems including under-nutrition and over-nutrition. Former President Nixon on December, 1969 quoted Dr. Arnold Shaefer as follows:

We have been alerted by recent studies that our population who are "malnutrition risks" is beyond anticipated findings, and also that in some of our vulnerable population groups--preschool children, the aged, teenagers, and the poor--malnutrition is indeed a serious medical problem.

- D. Can children gain from understanding of food and nutrition values, particularly including the energy-calorie relationship?
- E. Should the FTC amend its Rule to achieve this better understanding through advertising?
- F. Could and should that form of communication be merged with industry's present food advertising campaigns?
- G. If it did, what ensuing process of communication might succeed with children?
- H. Will other parts of the population benefit from these child-oriented processes?

As we seek to answer these questions, we will cite wherever possible known factual data or expert opinion.

CHILDREN AND TELEVISION ADVERTISING

While the print media (newspapers, handbills, magazines and comic books) play a role in the commercial solicitation of the child, television has become the major medium for commercial communication. A moderate TV watching child, viewing for 23-1/2 hours per week ²/ is potentially exposed to 21,320 commercials each year.* Many children see more. Non-commercial television, principally Sesame Street and the Electric Company, attracts certain age/maturity groups for a short period. But the Neilson/Arbitron ratings show overwhelmingly that commercial TV has vastly larger audiences.

Commercial communication to children takes at least four forms: intentional, general, peripheral and inadvertent.**We define intentional advertising as that for a product developed for a child using phraseology to appeal to a child for retail sales to

* Of the 23-1/2 hours estimated weekly TV watching assume:

4 Hours is PBS	= 0	= 0 30 sec. commercials
4 Hours is S/S am (9-1/2 min/hr)	= 4 x 19	= 76
8 Hours is weekday pm (12 min/hr)	= 8 x 24	= 192
7-1/2 Hours is evening (9-1/2 min/hr)	= 7-1/2 x 19	= 142
		410 commercials/
	410 x 52 = 21,320	week

** Notice how much more direct these definitions are than those of the NAB & CBBB.

children perhaps through a parent. General advertising includes messages for all ages for products that may appeal to all ages and thus be bought by all ages; the child is considered only one of many potential customers. Peripheral advertising here is defined as messages for products customarily used by adults but the messages are placed on programs watched by many children as well as adults; the children, it is thought, will repeat the name, the jingle, the message to an adult and thus reinforce whatever impact the message may have on nearby adults; the purchaser will probably be an adult. Inadvertent advertising occurs when an adult product is advocated in an adult manner to an audience that is not considered to have child members; it probably results from apathy, or intentional dismissal of the idea of a child as a viewer or consumer.

Examples of these are:

<u>Intentional</u>	<u>General</u>	<u>Peripheral</u>	<u>Inadvertent</u>
Toys	Foods	Detergents	OTC Drugs
Candy and Gum	Toothpastes	Household Polishes	Vaginal Products
Some Cereals	Sports Equipment	Child Medications	Caustics
Sodas and Juices	Some Snacks	Radio & TV Related	Chain Saws
Some Snacks	Sodas and Juices	Products	Adult Theatre Films
TV Specials for	Entertainment	Promos for Adult	
Children	TV Specials	Evening TV	
Fast Food Stores		Programs	

In all of these, the viewing child plays a role, sometimes alone, often accompanied. The parent may participate by nodding approval, giving the money, neutrally observing the transaction at the cash register or actually making the purchase. In such a case the adult reinforces the message of the commercial by seeming to approve its intention. 3/ The child probably has no concept that

it is involved in a triangular advertising-selling proposition in which the role of the child with various other parties is uncertain and legally ill-defined.*

Of course, from a lawyer's point of view, mere exposure to such solicitations is not harmful per se. From a behavioral standpoint, every commercial message may have a pro- or anti-social implication. The real question is how the child deals with the information that is imparted to him/her by thousands of annual sales messages. How do they process those messages, particularly food messages? Do their reactions shape lifelong attitudes toward a product, a class of products, nutrition, or health?

CHILDREN AND FOOD ADVERTISING

Children do view many advertisements for edibles and beverages through the medium of television. A.C. Neilsen Company provided Senator Frank Moss the names of the top 50 programs having substantial child audiences in the Fall of 1975. The six largest child audiences were on weekday evenings. Twelve of the top 15 child-drawing programs occurred during the evening. Weekend morning advertising generally drew a younger child audience; almost without fail children were a majority of the audience only on weekend mornings. (Appendix C) CBS confirms this in an internal memorandum dated December 4, 1974. (Appendix D).

*An interesting treatise on "Children as Consumers" was published in 1963 by James U. McNeal, Bureau of Business Research, Univ. of Texas Pp50.

Broadcast Advertiser Reports (BAR) keep a weekly computerized record of the placement of advertisements on television. Their cumulative reports, called Barcumes, sum up the exposure given different products. Their quarterly reports keep a cumulative record over the full year. For convenience we used the gross figures for weekend daytime. While BAR also has access to local or spot data, we here only use network reports. To illustrate how conservative this is, we urge study of network vs. spot dollars in Table 4. If both types are added together, almost every one of the figures in Tables 1, 2 and 3 would increase dramatically.

In April 1975, in a paper delivered before the American Chemical Society, ⁴/ I revealed the different emphasis given certain classes of food over the first nine months of 1975. We chose the nine month period to avoid the Fall football advertising. We used Barcumes to show total network advertising patterns and 39 Saturday/ Sunday daytime patterns.

TABLE 1

	3 Network Commercial Totals *	
Cereals	8166	
Candy & Gum	4083	
Shortening and Oils	3208	
Cookies and Crackers	2129	1975
Desserts	1733	First
Non-carbonated soft drinks	1637	Nine month totals
Carbonated soft drinks	1387	
Meats, Poultry	1328	
Macaroni/Spaghetti	1031	
-----	--	
-----	--	
Vegetables	571	
Citrus	311	
Cheese	320	

Then we showed the products most heavily advertised during the daytime on weekends, when the percentage of young children in the audience is the highest:

TABLE 2

Cereals	3832 **	
Candy and Gum	1627	
Cookies and Crackers	841	
Non-carbonated fruit drinks	582	
Macaroni, spaghetti, etc.	208	
Cakes, pies, pastry	104	
Desserts	80	
Citrus	78	1975
Carbonated soft drinks	63	First
Ice cream	53	Nine month
Soups	43	totals
-----	--	
-----	--	
-----	--	
Meats/poultry	2	
Vegetables	1	
Cheese	1	
Milk, butter, eggs	0	
Vegetable juices	0	

* For comparison purposes 12 month figures were: Cereals 10,975 and Candy and Gum 5,558.

** For comparison purposes 12 month figures were: Cereals 4,821 and Candy and Gum 2176.

Notice that of all the foods advertised over television in the United States, cereals lead every other category by an almost 2:1 ratio. In food advertising before the youngest child audience, cereals dominate to an even greater degree. Sweet foods predominate in the top seven classes in both audience analyses. Presweetened cereals themselves dominate, for those with the highest sucrose content--between 37.8 and 55.1 percent--frequently have high advertising budgets. (Appendices E & F). Vegetables and cheeses are ignored.

Fast food restaurants also heavily advertise to children.

Table 3 shows the network 9 month advertising patterns of 3 major chains, with delineation of the commercials aired on weekend daytime.

	<u>1975</u>	
	<u>Weekend Daytime Commercials</u>	<u>9 Month Total Commercials</u>
McDonalds	398	out of 812
Burger King	274	480
Kentucky Fried Chicken	110	557

Of particular interest is McDonalds. Local franchise holders sponsor local spot advertisements while the parent company sponsors network commercials. The combined 1975 budgets--\$55.3 million for spot and \$36.9 million for network--make McDonald's one of the heaviest and most frequent advertisers voicing messages to young children.

Since children feel some influence from advertising in all media, we have drawn some advertising budget estimates from Advertising Age, August 23, 1976. In their analysis of the 100 leaders' media expenditures in 1975 they list the major food companies. Note the emphasis on television.

TABLE 4

AD RANK	COMPANY	TOTAL (000)	% of Total Dollars							
			Newspapers	General Magazines	Farm Pub.	Spot TV	Net TV	Spot Radio	Net Radio	Out door
2	General Foods Corp.	157,124.9	5.1	6.5	--	33.2	53.8	1.3	0.1	--
12	General Mills	69,724.1	3.0	11.7	--	38.5	43.6	3.2	--	--
19	Nabisco Inc.	65,692.5	3.2	3.7	--	18.3	74.5	0.2	0.1	--
20	McDonald's Corp.	62,436.1	--	0.6	--	55.3	36.9	3.3	2.0	1.9
21	Ralston Purina Co.	58,251.5	5.2	9.3	1.0	20.0	62.1	1.5	--	0.9
22	Kraftco Corp.	57,302.4	5.0	21.2	--	30.7	36.1	4.4	1.9	0.7
26	Kellogg Co.	49,069.2	8.1	3.7	--	26.3	61.4	0.5	--	--
29	Norton Simon Inc.	47,547.5	5.8	27.3	--	25.3	35.7	1.8	--	4.2
36	Pillsbury Co.	36,306.7	3.1	6.8	--	25.1	61.3	3.0	0.3	0.4
39	Nestle Co.	35,613.7	9.7	2.4	--	30.6	56.4	0.8	--	--
41	Campbell Soup Co.	35,012.8	7.4	11.0	--	29.8	41.4	6.9	3.5	--
42	Borden Inc.	34,322.8	9.0	7.3	0.3	36.7	36.3	7.8	2.2	0.4
44	Standard Brands	33,168.5	11.7	10.1	--	40.6	19.2	12.6	3.5	2.3
50	Carnation Co.	29,214.4	3.2	1.4	0.4	26.3	62.6	6.1	--	--
52	CPC International	28,219.3	4.4	11.5	--	51.8	29.9	1.5	--	0.9
56	Quaker Oats Co.	26,897.5	8.1	10.1	--	32.3	48.8	0.7	--	--
74	Thos. J. Lipton Inc.	21,052.9	6.2	11.2	--	38.6	41.7	2.1	--	0.2
78	H. J. Heinz Co.	19,519.8	6.5	7.5	--	39.2	46.6	0.2	--	--
80	Beatrice Foods Inc.	18,833.1	12.3	4.0	3.3	56.2	9.6	13.1	1.4	0.1

- Advertising Age Aug. 23, 1976

To study who advertises selectively to whom, we have made an analysis of patterns of advertising. We chose three sample periods during the Fall 1975 quarter for this analysis: We analyzed 13 Saturdays, 9:30-11:30 a.m.; 13 Sunday evenings from 7:00-9:00 p.m.; and 13 Monday nights from 9:00-11:00 p.m. On Saturdays, we expected children to be a majority of the audience; on Sunday evenings they would be less than a majority but still a significant part of the audience; on Monday nights adults would

predominate. During all three periods some adults and some children would be in the audience. Among the sample findings:

General Food's Tang was advertised 24 times on Saturday mornings to once each for Sunday and Monday evenings;

Three Hershey products, Food Candy Bar, Kit-Kat and Reese Peanut Butter Cup, were exclusively advertised on Saturday morning; nothing appeared in the evening periods for these products;

Kellogg Pop-Tarts appeared ten times on Saturday mornings but not on the evening shows;

Nabisco aired its Cream of Wheat once during the Monday evenings; but 16 commercials for Chips Ahoy, 12 for Fig Newtons, and 16 for Oreo cookies were to be seen on Saturday mornings;

Nestlé, which owns Libby, advertised its fruits and vegetables during adult-watched daytime soap operas and game shows but concentrated its candy advertisements for Choc-O-Lite Bar, Bar Crunch, Quik and \$100,000 Candy Bar on Saturday morning with 12 to 21 commercials for each during this one quarter;

Quaker Oats used 58 commercials to stress Captain Crunch Punch Crunch on Saturday mornings in one quarter, but advertised its vastly superior cereal, Life, once, and that on a Monday night;

Ralston Purina advertised its Chicklets gum on Saturdays, but slotted its Trident sugarless gum to soap operas and game shows;

The California Raisin Advisory Board, on which we have already heard testimony, aired 98 commercials during the quarter. None were on Saturday day time or Sunday evenings;

Kraft advertised with a pattern so that 55% of their Kraft Food Candy commercials showed up when children were a big factor in the audience, but slotted its cheese ads so only 7% would have been seen by many children;

Ralston Purina aims many of its pet food ads to children, though not on Saturday mornings.

Dr. Charles Atkin, Dr. Scott Ward and Dr. Robert Liebert and R. Poulos have excellent published studies on children's perceptions of advertising.^{5/} While they observe different reactions they all found reactions; children respond to television advertisements. Dr. Joann Galst has further supportive evidence for these FTC hearings; she shows that children's responses to food advertisements impact on parents as the children try to influence food purchases. Others have confirmed this.

Thus, I think it safe to say: The food industry seeks to influence children with its food advertisements, and they are affected. Children communicate their food desires and influence food selections as a result. By aiming certain products of dubious nutritional worth without nutritional information at young audiences, food companies seem to take advantage of their nutritional naivete; the lack of nutritional information--including calories--in their advertisements compounds children's vulnerabilities. It is an unfair practice.

CHILDREN'S VULNERABILITY FROM A PUBLIC HEALTH STANDPOINT

We have heard from a number of previous witnesses on the nutritional vulnerability of children. Drs. Briggs,^{6/} Jordan, Levine, Connor, Tepperman, Wissler and Paul had strong comments in San Francisco

and Chicago. Obesity, early developed fat cells, and even cholesterol concerns were aired. Drs. Owen and Bryan in Dallas expressed many of the same concerns, but pointed out the particular nutritional vulnerabilities of certain ethnic and disadvantaged groups in the south and southwest. We will not repeat their expert views. (See Appendix A)

Here in Washington, from the prospective witness list, it appears that many witnesses will have comments on the young public's nutritional health. Dr. Albert Stunkard is especially knowledgeable. Recognizing that excess calories often come as sugar, Dr. A. Nizel comments on a child's physical vulnerability in a statement for the record. (Appendix G). Obesity in the child apparently has dangerous connotations - a fact of which the public may well be unaware. 7/ Caloric values of popular foods thus become of major importance. Excess sugar, which brings excess calories, brings another health concern -- cavities.

Non medical and business people have taken cognizance of the public's vulnerability. For example, the Heinz Corporation's Board Chairman Henry J. Heinz II voiced his concerns in 1974. In a contribution to Impact of Science on Society, he wrote:

...We are a nation of nutritional illiterates. Despite a wealth of scientific knowledge of nutrition, too many of us do not know what a balanced diet is, and are ignorant of the essential nutrients we need and the foods that contain them.

We have an abundant food supply yet our eating habits are deteriorating. And it is not just the poor who are affected, though lower-income families undoubtedly fare less well nutritionally than the average.^{8/}

A 1965 USDA study gives support for Mr. Heinz's statement.

In comparisons of nutrient shortages in the diet of the U.S. population, the USDA discussed Family Income vs. Percent Deficient Nutrients:^{9/}

TABLE 5

FAMILIES SHORT 4 OR MORE NUTRIENTS, IN
RELATION TO FULL NRC STANDARDS

<u>Family Income</u>	<u>% Deficient</u>
Under \$3,000 -----	21%
\$3,000 to \$4,999 -----	15
\$5,000 to \$6,999 -----	16
\$7,000 to \$9,999 -----	12
\$10,000 plus -----	11

In Heinz's article, the author suggested "the food and beverage industries . . . should follow policies of scrupulous accuracy in advertising and labeling."^{8/} Mr. Heinz thus recognizes that a large segment of the U.S. population, being at risk, is particularly vulnerable to advertising which does not upgrade diets. We concur. Children are nutritionally vulnerable, particularly poor children.

ARE DEVELOPING CHILDREN PSYCHOLOGICALLY VULNERABLE TO FOOD RELATED MESSAGES?

As a starting premise we note that most commercial law is based on the concept of a reasonably prudent consumer interacting with those who sell. But children, almost by definition, are reasonably imprudent. Thus in a commercial transaction special precautions must be taken to avoid an unfair or deceptive practice.

With younger children the very existence of a commercial's selling intent may not be understood.^{10/}

The Federal Communications Commission in its 1974 "Children's Television Programs - Report and Policy Statement", a document which reflects four years of consideration, strongly set forth the Commission's concern with advertising seen by children:^{11/}

30. Traditionally, however, the Commission has not attempted to exercise direct supervision over all types of advertising abuses. Since the Federal Trade Commission has far greater expertise in, and resources for, the regulation of false or deceptive advertising practices, the FCC has largely confined its role in this area to notifying stations that the broadcast of material found to be false or deceptive by the FTC will raise questions as to whether the station is operating in the public interest. See Public Notice entitled "Licensee Responsibility with Respect to the Broadcast of False, Misleading, and Deceptive Advertising, FCC 61-1316 (1961); "Consumers Association of District of Columbia," 32 FCC 2d 400 (1971). We do not believe that it would be appropriate to change this policy at the present time. The Federal Trade Commission is currently conducting inquiries into advertising practices on children's programs (F.T.C. File No. 7375150) and food advertising (F.T.C. File No. 7323054) which cover many of the advertising practices objected to by the parties before the Commission. In light of the actions of the FTC, we have chosen not to address some of these specific promotional practices. On the basis of this proceeding, however, we are persuaded that an examination of the broadcaster's responsibility to children is warranted in the areas of the overall level of commercialization and the need for maintaining a clear separation between programming and advertising.

34. If our policy against overcommercialization is an important one, and we believe that it is, it is particularly important in programs designed for children. Broadcasters have a special responsibility to children. Many of the parties testified, and we agree, that particular care should be taken to insure that they are not exposed to an excessive amount of advertising. It is a matter of common understanding that, because of their youth and inexperience, children are far more trusting of and vulnerable to commercial "pitches" than adults. There is, in addition, evidence that very young children cannot distinguish conceptually between programming and advertising; they do not understand that the purpose of a commercial is to sell a product. See Report to the Surgeon General, "Television and Growing Up: The Impact of Televised Violence," Vol. IV at 469, 474 (1970). Since children watch television long before they can read, television provides advertisers access to a younger and more impressionable age group than can be reached through any other medium. See "Capital Broadcasting Co., supra," at 585-6. For these reasons, special safeguards may be required to insure that the advertising privilege is not abused. As the Supreme Court stated, "It is the interest of youth itself, and of the whole community that children be . . . safeguarded from abuses." "Prince v. Massachusetts," 321 U.S. 158, 165 (1943).

While deferring to the FTC on advertising content, the FCC made some pointed comments on the role television should play with children. The remarks were primarily aimed at programming, but obviously carry over into the general commercial area.

16. As we have long recognized, broadcasters have a duty to serve all substantial and important groups in their communities, and children obviously represent such a group. Further, because of their immaturity and their special needs, children require programming designed specifically for them. Accordingly, we expect television broadcasters as trustees of a valuable public resource, to develop and present programs which will serve the unique needs of the child audience.

17. As noted above, the Federal Radio Commission and the Federal Communications Commission have consistently maintained the position that broadcasters have a responsibility to provide a wide range of different types of programs to serve their communities. Children, like adults, have a variety of different needs and interests. Most children, however, lack the experience and intellectual sophistication to enjoy or benefit from much of the non-entertainment material broadcast for the general public. We believe, therefore, that the broadcaster's public service obligation includes a responsibility to provide diversified programming designed to meet the varied needs and interests of the child audience.

18. In this regard, educational or informational programming for children is of particular importance. It seems to us that the use of television to further the educational and cultural development of America's children bears a direct relationship to the licensee's obligation under the Communications Act to operate in the "public interest." Once these children reach the age of eighteen years they are expected to participate fully in the nation's democratic process, and, as one commentator has stated:

Education, in all its phases, is the attempt to so inform and cultivate the mind and will of a citizen that he shall have the wisdom, the independence, and, therefore, the dignity of a governing citizen. Freedom of education is, thus, as we all recognize, a basic postulate in the planning of a free society. A. Meiklejohn, *The First Amendment is an Absolute*, in 1961 *Supreme Court Review* 245, 257 (Kurland ed.); see generally Brennan, *The Supreme Court and the Meiklejohn Interpretation of the First Amendment*, 79 *Harv. L. Rev.* 1 (1965).¹

We believe that the medium of television can do much to contribute to this educational effort.

¹In the words of the Supreme Court, "[a] democratic society rests, for its continuance, upon the healthy, well-rounded growth of young people into full maturity as citizens, with all that implies." *Prince v. Massachusetts*, 321 U.S. 158, 168 (1943).

When it came to helping the FTC in these regards, though, the FCC proved to be a paper tiger. The FTC at one point sought the airing of educational commercials. The FCC opposed them.^{12/}* When this Council, CCMM, recently sought to balance commercials with information about their techniques, the FCC rejected our petition.^{13/} Thus it seems clear that the FCC has declared children to be vulnerable, but that in advertising the FTC has the prime responsibility. In this delegation of responsibility the FCC obviously rejects the recommendations of the White House Conference on Food, Nutrition and Health. It recommended:^{14/}

Any nutrition education program must have the assurance that it will have at least as much exposure to the people through their mass media as is received by any selling effort on radio and television in behalf of major cigarette brands, automobiles, or airlines or other major consumer product selling efforts. These are not impugned. We merely say that nutrition education should get at least as much mass media support.

Dr. George Gerbner and Dr. Larry Gross at the Annenberg School of Communications at the University of Pennsylvania have one of the longest on-going study of the public's view of television. As an aftermath of the violence studies conducted under the auspices of the Surgeon General in the early '70s,^{15/} Gerbner and Gross were commissioned by the National Institutes of

* This paper is on file at the Federal Trade Commission

Mental Health to study children, violence, and general public reactions to television. While their "specialty" is violence, they have studied television's effect on children. In the context of discussing television as an entertainer, they say:

... "It's not surprising that the children we tested seemed to be more strongly influenced by TV than were the adults . . . nearly half the 12 year olds watch an average of six or more hours of television per day . . . The effect of TV should be measured not just in terms of immediate change in behavior, but also by the extent to which it cultivates certain views of life . . ." ¹⁶

The Office of Child Development, in a September '72 paper to the FTC outlined the steps of cognitive development which might apply to commercials. Since our citizens watch television from the age of one, the OCD, building on Dr. Jean Piaget's findings, believes that:

"The television screen (particularly color TV, since babies are attracted earlier to color than to form) is likely to gain an infant's attention months before they can understand what is going on. This neuro-physiological make-up of human beings, coupled with an early opportunity to watch television, would make it easy for babies to become 'addicted' to watching the set until they are old enough to be able to do other things."

The OCD goes on citing Blatt, Spencer and Ward, to say that:

"Children will respond to and remember fragments of information that are often repeated, spoken by real or animated authority figures, or that seem to satisfy an impulsive need. The latter may be an explanation for children's fascination and recall of food commercials." (See Appendix H)

This concern for children's attitudes was reflected in Capital Hill hearings before the Senate Select Committee on Nutrition and Human Needs on June 27, 1976.* Dr. Theodore Cooper, Assistant Secretary for Health, Department of HEW, said:

Since food patterns are established in infancy, parents and other caretakers of infants and young children must play a strong role in determining nutritional health of children. Emphasis should be given to helping parents understand the nutrition needs of children and how best to meet them while, at the same time, developing sound food habits. And there's a real biological basis, I might say parenthetically here, for seeing to it that excesses are not introduced as a feature of the food habit process in the young..

Later he went on to say:

"... Obesity constitutes a very serious public health problem in the underprivileged and economically disadvantaged ..."

And later:

"I know of no condition where the elimination of obesity wouldn't be a beneficial public health effort."

Later, having a discussion with Senator McGovern over the WIC program wherein McGovern asked him for a summary of advice on nutrition, Secretary Cooper replied:

"... My first advice would be to eat less."

As a second priority, he included:

"... reducing our preoccupation with sweet things ..."

Then Dr. Beverly Winicoff, Assistant Director of Health Sciences at the Rockefeller Foundation appeared as a witness. She said:

* Available October 26, 1976 at Senate Offices.

"... We must first learn that [more] and [better] do not necessarily proceed hand in hand."

She followed that with:

"... it is clear that children who become fat have a very much likelihood of being fat adults."

Then Ex-Secretary of Health, Dr. Phillip Lee, presently Director of Health Policy Programs for the School of Medicine of the University of California in San Francisco interjected his remarks:

"... We get virtually all our nutrition education through commercials in a food-for-profit industry and that does not provide us with the information people need to make informed choice about a health-promoting diet."

Then Senator Percy chimed in:

"I think your last sentence really in a sense summarizes the whole intent and purpose of this Committee. We have tried to provide a forum through public hearings in the U.S. Senate to provide the technical guidance and advice that the public needs to offset the day-by-day pounding and drumming of commercials that condition us from as early as two or three years of age, to eat what we are told to eat, whether it is good for us or not."

Sometime later, Senator Hubert H. Humphrey was commenting on the usefulness of communicating to entire families through children. He used them in a political sense, he said, with great success and it would probably work on nutrition:

"Kids are the media, that is the way you get through. Adults have already made up their minds, most of them are hopeless by the time they get beyond 21 years of age."

He followed this with the observation that maybe what he was doing was repeating the Lord's phrase that "A little child shall lead them." [emphasis added]

To analyze what these national figures were referring to we reviewed many "storyboards" of foods which have been heavily advertised in front of large child audiences over the last six years. Several examples appear in Appendix I. The frequent mention or implication of energy focuses our attention on § 437.8 in the FTC food Rule. These commercials stress energy; they visually depict energy situations; they use euphanisms for energy such as "Go Power", "Get what it takes", and "raw power". With pictures, they depict constant motion. Perhaps the ultimate in such representations was part of a Kellogg Corn Flakes ad which used the words "running, rolling, floating, moving, turning, throwing, smiling, grooving, calling, jumping high and never falling," as the video picture showed frenetic movement. (Appendix J) No calorie values were mentioned.

Misinformation about food in advertisements, or the omission of pertinent information in food advertisements -- and the impact of that on children -- was also addressed by previous witnesses McClure, Sidles, Burnett, Burch, Maloney and Atkin in San Francisco and Chicago. Here in Washington, Dr. Kenneth O'Bryan shows how food advertisers can and do manipulate children -- using techniques which require far more sophistication in the young audiences than can be realized.*

* "...current commercials dealing with foods are particularly skillfully constructed in that they combine behavior modelling, attention direction, role-identification and subtleties of need/want psychology to create in the child a direct learning experience...."

Dr. Thomas Donohue describes the naivete of poor black children, saying that in his studies 56% of the children had no awareness of the commercial's purpose. Dr. Samuel Ball describes how the young are affected--we suggest to their detriment--by memorable short food promoting messages which have no bearing on nutrition and health.

We do not know of many advertisements that mention calories in a product seemingly developed for child consumption. There are few mentions in those developed for general consumption. Hence § 437.8 is critically important in its intentions.

As we have said above, we think caloric description such as proposed by § 437.8 would be better placed in the context of daily calorie/nutrient needs. This introduces the concept of quality as well as quantity. Mention of calories without mention of nutrients may lead children to ignore the fact that their daily nutrient intake must be met by judicious selection of foods before the calories consumed kill the appetite; they must also understand that calorie intake can be excessive, and that more calories are not necessarily better.

The conclusion one is forced to reach from a review of the available data, studies of the subject, and testimony heard thus far in these proceedings is that television advertising of any food, any time, to an audience which includes a large number of children, is understood by children to be a recommendation for that

food. It appears that children will infer from such repeated recommendations that it should be consumed. For the child's physical and psychological health, then, if energy is mentioned or depicted, or if satiety or diminution of appetite is portrayed, all stemming from caloric ingestion, the child is entitled to understand the nutrient worth of that food, including its caloric value. We contend that the repeated advertising of a food to children under these conditions without factual nutrition information constitutes an unfair and deceptive act.

IF CHILDREN HAVE NUTRITIONAL INFORMATION BROUGHT TO THEM
VIA ADVERTISING, CAN IT BENEFICIALLY INFLUENCE
WHAT THEY EAT?

Most Americans are reputed to eat over one-third of their meals away from home. Children are no exception. They snack with other children. They patronize vending machines. They go to fast food stores on foot, by bicycle or in someone's car. They go to cafeterias. In few of those situations is there nutritional monitoring by a concerned adult. The child makes the selection.

For the purposes of these hearings it does not matter how much food children actually buy, for whether they buy foods or not they receive the food advertising communication from sponsors. The young are open minded receivers of food messages; they are relayers of food messages; they are absorbers of food messages; because they are particularly naive on nutritional

subjects, they are left unprotected when a food promotion avoids mention of nutritional worth, including calories. As they grow to adulthood, as is pointed out by Drs. Atkin and O'Bryan, they may continue to possess misconceptions about food planted in their youth.

Children's influence may extend beyond their own discretionary food activities. "Programmed" to request foods -- a term used by witness Burch in Chicago -- the child is effective in family food selection and menu planning. Obviously in Ms. Burch's Omaha, some parents are in a state of revolt and are leaving the child at home. She said:

"One of the interesting things . . . is a new trend . . . that is parents, mothers particularly, are not taking their children to the grocery store with them to shop . . . The reason for that is because of the programming that has come into the environment and the mind of children which provides power tactics on their part when they are in the grocery store."

Children may request, may demand, or, according to witness Jordan, may surreptitiously load the shopping basket with many advertised foods as it travels through the supermarket.

This "programming of children" is no accident. Sponsors plan carefully to gain the child as a direct consumer, or as a salesperson within the home. My testimony before the Consumer Subcommittee of the Commerce Committee of the U.S. Senate, on February 28, 1973, entitled, "The Selling of the Child" delineates how methodically food advertisers research to encourage children's consumption of their products. *

* Currently available in reprint form from House Sub-committee on Communications, "Hearings on Broadcast Advertising and Children", July, 1975, Serial No. 94-53 or from Council on Children, Media and Merchandising-\$5.00.

What is the result of all these suggestions implanted in the nation's children? Witness Joann Galst reveals that in her survey children were successful in 45% of their purchase influencing attempts and that television viewing was positively correlated with purchase influence attempts at the supermarket. Dr. Susan Sharaga has shown the more television a child watched at home, the greater his/her reported preference for and consumption of heavily advertised food products, the poorer his/her nutritional knowledge and attitudes, and the lower his/her knowledge of the validity of nutritional claims in television advertisements. * 17 /

Dr. Gayle Nevill has stated "...the younger children are more prone to believing invalid nutritional claims in food commercials and that they make the most requests for food purchases." * 18 / Sally Dusere, who extended the work of nutritionist Dr. Virginia Beal of the University of Massachusetts, has written "...the more television viewing children did, the more likely they were to eat heavily sugared cereals, the more often they ate between meals, the more total snack foods they ate, the more they ate candy and chips, and the more often they ate empty calorie foods." * 19 /

For those who would proclaim that mothers should protect their children from such practices we refer to the study of Columbia University's Dr. R. Lehmann entitled, "Nutritional Knowledge, Attitudes and Food Consumption Patterns of U.S. Female Heads of Households." 20 / He states that, "Nutritional knowledge varies widely across the sample with very few people extremely knowledgeable in an objective

* On file with the Federal Trade Commission.

sense. Put differently, a substantial fraction of the sample is mis-informed about nutrition." In his Table 1, under Section II-- Nutritional Information Sources, Dr. Lehmann notes some interesting observations in answer to his question about the relative importance of sources for nutrition information:

	No Answer	"None"	Very Little	"Some"	"Quite" A Bit	A Tremendous Amount	Mean	Rank
Books	3.7	20.6	21.0	35.3	14.9	4.5	2.60	5
Magazines	3.2	8.7	12.6	44.9	26.3	4.4	3.05	3
Labels on the packages food comes in	3.7	5.7	16.5	43.6	26.4	4.0	3.07	2
Your mother	7.3	38.7	16.4	21.8	12.0	3.7	2.20	10
Other family members	6.0	34.7	23.8	26.7	7.2	1.6	2.12	11
Friends	5.5	22.4	26.5	36.8	8.1	0.6	2.34	8
Doctors	5.0	29.6	22.4	28.8	11.2	3.0	2.32	9
TV programs	4.9	19.6	25.0	38.8	10.3	1.4	2.46	7
TV advertisements	4.8	17.8	27.1	39.1	10.1	1.1	2.47	6
Newspapers	5.2	12.9	20.7	44.1	15.5	1.5	2.71	4
Your own experience	4.1	4.3	6.2	35.4	39.3	10.7	3.48	1
Courses in school	5.4	50.9	9.1	16.1	11.1	7.4	2.10	12

Interpretation: Personal experience is by far the most important source of nutritional information with labels on packages and magazines next most important. The importance of school courses, other family members, doctors, and friends is rated very low. Whether this reflects unavailability or lack of expertise is not clear.

Note how few cite television commercials as a source of nutrition information. Note further how few cite their mothers.

Even the limited vocabulary of children renders them vulnerable.

Dr. Norge Jerome in her study entitled "Children and Nutritional

Terminology" says: *

* Report being written as of date of this submission. Will be available 11/8/76 at FTC.

"During September and October, 1976, parents and teachers in Kansas and Missouri asked 63 children between the ages of 3 and 10 to define or explain orally or in writing, 9 food or nutrition related terms. These terms--calorie, energy, nutrient, protein, carbohydrate, fat, natural foods, organic foods and vitamins--are commonly used in food advertisements. I analyzed the results of the surveys.

"The results indicate that children of this age group have little or no knowledge of these terms, although some were able to substitute words and other symbols and images for a given term. These were often erroneous. Others described events or situations which conveyed their understanding of the term. These too were often erroneous. Here are the details:

- Of 44 four to six year old children in two schools and one home, the majority, that is 30-35, had no answers for calories, energy, nutrients, protein, carbohydrates, natural foods and organic foods. Those who answered did so incorrectly; however, only 8 failed to respond to fat and vitamins.
- The 36 responses to vitamins indicated that the term vitamin is conceptualized as pills or medicine to be taken when ill or on a diet. The symbolic image of vitamins for this group of children was Bugs Bunny and the Flintstones.
- Fat held a negative connotation to these 36 child respondents. It was associated with meat, danger and obese individuals. Visible fats in foods, according to these young children, should always be avoided or discarded.
- The 14 three year old children from one school who responded to the study could not decide or explain most of the terms. However, their ideas of vitamins and fat were similar to the 4 to 6 year old children.
- There were five respondents between the ages of 8 and 10 from one school. These children associated each term with either a food item or expected outcome of physical or feeling state. For example: "Energy makes you run

better, or makes you strong", "Protein makes you eat better", "Nutrients help you grow better", and "Carbohydrates make you sleep better." Examples given for natural foods were candy, gum, fruit, vegetables and dirt. Examples of carbohydrates were flour, bread, potatoes and meat.

Although this study does not claim scientific rigor it does reveal that a 3 to 10 year old who responded to the question lacked basic information on most of the terms referred to. Their concepts of vitamins and fats can be classified as "folk knowledge", derived from informal learning and observations of their surroundings during this socialization process. Since some food nutrition information is being channeled to young children, some effort should be made to ensure that the information they receive is accurate and beneficial to them."

The irrevocable conclusion is that children are physically and psychologically vulnerable to today's food advertising. Since they have an ability to communicate within the family and at the store about food selections, perhaps to a nutritionally illiterate adult, with some creative effort they could be protected through acquiring better understanding of nutrition, including the energy/calorie relationship. It is an unfair practice to perpetuate their nutritional ignorance.

CAN CHILDREN UNDERSTAND CALORIC AND NUTRITIONAL VALUES?

The State and Federal governments spend millions trying to awaken the public about nutrition. Food company materials, some promotional, some educational, swamp our schools. Trade organizations such as the American Dental Association, the Cereal Institute,

the National Dairy Council, and the National Canners have printed educative materials to appeal to children. A recent Library of Congress report lists some 35 organizations publishing such materials. They seem to fail in the face of massive, non-nutritional advertising.

There are few food company executives, like Mr. Heinz, who want "scrupulous accuracy" in food commercials. To them it is akin to killing the golden goose. It need not be. With proper research the food industry could find a means, perhaps graphic, of revealing to children a food's nutritional worth even while advocating the product. Food companies heavily research how to communicate their sales message. A similar effort to communicate the nutrition message would yield results.

Resistance to nutritional information in commercials may stem from the belief that the subject is too dull and complicated; or that only one message can be delivered in a good advertisement; or that insufficient time exists within a 30 second commercial. We have learned that food products sold with the assistance of premiums often omit information regarding nutrition. Dr. Charles Atkin pointed out in Chicago:

A premium offer was contained in one-fourth of the ads,* generally consuming 10 to 15 seconds of the half-minute message. Premium information tended to displace nutritional information; just 13% of the ads featuring a premium made reference to nutrition, while 42% of food commercials without premium promotion talked of nourishment of vitamins.

* Saturday morning.

Almost half of the communication time is thus not only non-nutritional, but the premium, having no bearing on the product, may distract from the actual food message. In this regard it is anti-nutritional.

We suggest that premium promotion give way to nutritional promotion.

The argument that more than one point cannot be stressed in an advertisement is refuted by a food ad with a premium message. Inescapably it has two or more messages. Dr. Atkin in Chicago testified at some length on the prevalence of multi-message commercials. "Clustering" and "piggy-backing" are well known advertiser terms for multiple message communications. They go on all the time.

To those who deplore nutritional content in food advertisements because it is too complicated or too dull, we point to present day pet food commercials. They are often loaded with nutritional data. (If pets could understand television, they would have greater access to nutrition information than most of the population.) (Appendix K)

In recent years, "eight important vitamins" has become a familiar phrase in cereal advertisements. We have reason to doubt this phrase really means something to children. Dr. Liebert has shown in other types of advertisements secondary communications can confuse or mislead.^{21/}

Nutrition messages within food commercials then seem possible. The question becomes "How?".

We view this as a see-saw question. On one end we would like to have children learn 4-7 basic points about nutrition. On the other end we would like the message to be absorbed by children as young as four or five. In graphic form, we have this situation:

7 Points	6 Points	5 Points	4 Points		4 yr. old	6 yr. old	8 yr. old	10 yr. old
Nutritional Message				^	Maturity of Child			

The fast learning 4 year old may learn the four point nutritional message immediately, and may gradually understand the six point message after 200 or more exposures. The slow learning ten year old may learn the five point nutritional message quickly, and the six point nutritional message only after multiple exposures.

Dr. Atkin in his Chicago testimony, emphasized the care that must be taken with such efforts. Recognizing the repetitive nature of food advertising, he reported that in a multiple sophistication level message, the older and sharper children may learn

quickly, while the younger and slower children may absorb the easy parts of the message first, and the more complicated parts later. If we are considering a calorie and nutrient message, this learning capacity must be researched carefully.

In analyzing how to cope with these hurdles, it is important to remember food commercials are highly repetitive--even more so if each contains a similar graphic message. Our estimates show children, particularly young children, potentially exposed to 8,580 - 13,260 commercials for edibles in a typical year. (Appendix L) These may be for only 80-90 products, representing less than 10 product categories. Hence the repetition factor is high. Repetitive messages, as pointed out by Drs. Atkin, O'Bryan and Samuel Ball, often become "overlearned messages". They are hard to displace from memory. But if these "overlearned messages" contain the a-b-c's of nutrition education, they can provide a basis for prudent food selection throughout life. "Thirty days has September, April, June and November," while not a competitive message, is a familiar slogan to most adults, and recalls when one first learned the names of the 30 day months as a child. "An apple a day keeps the doctor away" is another, unfortunately mythical, food remembrance. Many adults today can still sing the jingle which sold Wheaties via Jack Armstrong in the '30's, of Jello in the '40's. Such recall could contain nutritional facts.

In San Francisco witnesses spoke of mythology, early learned, which defies educational correction. Today's high repetitive

food commercials, it was acknowledged, may be instilling such food myths. In an earlier FTC submission, Dr. O'Bryan said: "... there is ample evidence that commercial type messages, once learned, are highly resistant to erosion through memory loss ..." But with reforms, our children, repetitively alerted to nutritional understanding, could carry not food myths but food knowledge into adult life.

SHOULD THE FTC AMEND ITS RULE TO ACCOMMODATE CHILDREN
AS PART OF THIS RULE-MAKING IN FOOD/NUTRITION ADVERTISING?

The FTC has a clear mandate to protect children. Ex-Chairman Lewis Engman recognized this in his testimony before the Senate Commerce Committee, FTC Oversight, March 14, 1974. He said:

I think that the law historically has recognized that children are treated differently. There are different standards, standards that are applied with respect to criminal prosecutions, with respect to our whole juvenile court system, and with respect to a host of other areas in the law.

Because most of the advertising to which children are exposed comes through licensed television communication, the legal rights of children face examination from several quarters.

We have reprinted many of the most pertinent aspects of FCC decisions on Pages 18 and 19 of this testimony. The principal cases seem to be:

Prince v. Massachusetts, 321, U.S. 158, 168 (1953)
Capital Broadcasting Co. v. Mitchell 333 F. Supp 582, 584
(1971); aff'd 405 U.S. 1000
Topper Corporation, 21 FCC 2d. 148 (1969)
American Broadcasting Co. 23 FCC 2d. 132 (1970)

It is interesting to note that among comments filed on the FCC's "Children's Television Programs--Report and Policy Statement" in 1974, broadcasters had very specific views about the responsibility of various Federal agencies. In a footnote to a paragraph summarizing certain industry practices, the FCC states:^{22/}

In this regard, it should be noted that to the extent broadcasters agreed that government intervention in the realm of advertising was appropriate at all, they considered the Federal Trade Commission to be the appropriate agency to handle this function. Some licensees thought the FTC was overzealous; none of them considered it too timid or inadequate to the task.

It must also be noted that the FCC had a rather narrow interpretation of children's programs--defining those as when children were in a majority of the audience--and thus the question of protecting large numbers of children in an audience when not a majority still had to be addressed. The FCC's policy statement acknowledges children's need for protection from certain advertising practices, but defers most responsibility to the FTC.

As to the FTC's own responsibility in regard to children as part of the general public, a number of cases seem pertinent. The Commission clearly stated its special concerns for children and advertising (even of an "adult" product) in its "Statement of Basis and Purpose of Trade Regulation Rule 408" dealing with cigarette advertising. The Commission said:

*** (T) hroughout the law in general and under section 5 of the Federal Trade Commission Act in particular, it has been recognized that minors constitute as especially vulnerable and susceptible class requiring special protection from business practices that would not be unlawful if they only involved adults. Accordingly, a marketing practice, directed in a substantial part toward minors, that interferes substantially and unjustifiably with their freedom of buying choice is an unfair or deceptive act or practice even if it is not especially pernicious as to adults.

A more comprehensive review of pertinent FTC cases bearing on this Rulemaking procedure can be found in Appendix M.

An obscenity related case also stressed that children were to be considered even if they were not the majority group to be affected. See Ginsberg v. New York, 390 U.S. (1968).

Perhaps being threatened by the obvious mandate for the FTC to protect children, representatives for the food advertising industry in San Francisco, Chicago and Dallas raised objections to children being considered under this very Rulemaking procedure.

Gilbert Weil stated: "One of the doors it (the FTC) did not open is the very separate subject of the different kinds of impact of advertising on children as distinct from adults...we would expand the scope of the hearing to such an extent as getting into the totally different subject matter of child psychological, social behavior, cognitive behavior and all the rest of that. It's an immense field, probably larger than the nutritional field that is involved in the proposed TRR itself."

Other attorneys in addition to Weil spoke of the problems of preparation and research if children were to be included in the rule making proceeding. The National Association of Broadcasters' Brenda Fox made it obvious they too did not want children included. One of these discussions included the industry's position that they had no warning that children were to be considered here. In response we can only point to the industry-consumer March 21, 1974 meeting under FTC auspices and state that certain industry representatives have short memories, or have not done their research, for in that meeting the then Director of the Bureau of Consumer Protection, J. Thomas Rosch, said energy clauses relating to children would be in the Food/Nutrition Rule.^{23/}

Children are citizens; they are vulnerable; children warrant special protections; children are part of the general television audience and witness food advertising; children influence food selection; children's nutritional health is directly related to the future public's health.* Since March 1974, the food and advertising industries have been aware that children were to be part of the Food/Nutrition TRR. To exclude them now would be to further delay protections for a vulnerable audience of major size. If the FTC is to act on food advertising, it must include children under this rule and deal with them in a meaningful manner.

* See testimony of Drs. Levine and Bryan.

MERGING WITH INDUSTRY PRACTICES

Sponsors want to sell foods. When they pay \$10,000 to \$40,000 for 30 seconds on a network they don't want others usurping portions of their valuable time.

Graphics can be compatible. Current advertising of toys often contain "disclaimers," perhaps as a result of an NAB effort. (Some have curious phraseology.) A portion of the screen is thus set aside for a consumer-oriented message.

Pet food ads often contain detailed identification of nutrient content using numerical portrayals.

In the field of general communication, a TV program for the deaf in Los Angeles carries a circular inset showing a sign language interpreter while the rest of the picture is on the original personalities. Part of the Republican Convention used a similar technique. Industry can meet special needs.

Can advertisers accommodate special conditions for advertising in front of children? They claim to meet the special requirements of the NAB Code for Saturday advertising. They claim to consider the requirements of their OTC drug advertising constraints. They claim to restrain depiction of certain horror, sex or violence scenes as required by the Family Hour. There is ample evidence that broadcasters and their advertisers could conform to special constraints, particularly when children are involved. No first amendment violations are claimed as these standards continue. Advertisers in front of children do and can continue to accommodate special conditions in their advertisements.

OTHER BENEFITS

A comment on the tangential benefits of nutrition communication to children: If graphics are to be used, those with impaired hearings would gain. They cannot hear an audio description.

We also believe that some families in a bi-lingual situation would benefit. One sees many graphic signs in the nation's Southwest and in Florida, designed to help the Spanish-speaking. (Appendix N)

These are sizeable benefits. The hearing impaired number 10.4 million. ^{24/} The population with English as a second language have been estimated to number 4,940,000. ^{25/}

WHAT PROCESS OF COMMUNICATION MIGHT CONVEY NUTRITIONAL INFORMATION TO CHILDREN?

To ascertain how best to communicate nutritional information, we consulted with experts in television communication to children. Noting that children even younger than three can indicate food choice, but certainly cannot read, we pondered the role of graphics in conveying nutritional information to this audience. Dr. Atkin reported on children's favorable response to a highly graphic tooth/tongue public service message of 60 seconds length. We noted elsewhere that a careful campaign against household poisons using a graphic "Mr. Yuk" has been launched nationwide by Blue Cross/Blue Shield with apparent FDA and industry assistance. (Appendix N) We noted the graphically illustrated campaigns of the National Dairy Council and the National Canners. We remembered the attractive animated nutrition education

spots using "Seymour Vitamutt" sponsored by the New Mexico Nutrition Improvement Program. (Appendix 0) We reviewed the remarks of Seymour Banks, a VP of Leo Burnett Company on the values of pro-social messages. We noted ABC's current use of animated figures to talk about nutrition and Kellogg's Tony the Tiger and his selling of energy. We reviewed the work of Drs. Lynette Friedrich and Althea Stein; and we discussed approaches with Dr. Kenneth O'Bryan. We also noted in the Final Report of the White House Conference on Food, Nutrition and Health the comment that to reach nutritionally the most vulnerable groups:

"Two advertising techniques - the graphic and the catchy slogan - are singled out by the Panel, as having special promise in drawing public attention to the nutrition campaign." 26

We reviewed classroom materials prepared by Safeway and Giant. We also noted the article of William Whitford in the Wisconsin Law Review in which he stressed that too much or too complexedly presented information can have no impact, and even contrary impact. 27

We made a review of research relative to children and TV advertising, particularly advertising of foods. With the assistance of Dr. George Comstock, the Rand Corporation's editor of the 5 volume study "Television and Human Behavior", we sought out and obtained the consultant advice of Dr. Norma Feshbach of UCLA. We also have obtained the consultant advice of her husband, Dr. Seymour Feshbach. Their vitas are in Appendix P. Their track record is impressive.

For graphic input we sought the talents of artist Milton Zolotow of Los Angeles, familiar with cartoon-making, advertising and broadcasting. He accepted our challenge to devise a cartoon graphic device which would test how to convey relative nutritional information to children within a food advertisement.

To accomplish the requisite work in the short time before this hearing, we put together the following team: Norma Deitch Feshbach, Ph.D, Tricia S. Jordon, M.A., Arline S. Dillman, M.S.Ed., Seymour Feshbach, PhD. and Milton Zolotow.

Following early brainstorming sessions in late May and early June, 1976, a mode of graphic communication was decided. There were many variables. We explored these with children drawn from summer camps in June and July. There were many revisions and modifications as children indicated their interests and areas of confusion. We settled on a pilot approach. As this stage was the antecedent for later testing, we have reported on these steps in Appendix Q.

A note of caution: Since we wanted to communicate as much to the youngest children as the the eleven and twelve year olds, we had to make some compromises. In the first pilot stages we had wanted to show protein, six vitamins and two minerals. Using letters in the middle of a graphic, we confused the children. The mass of letters confused them, rather than the specific representations. We thus turned to bar graphs, only showing percent of RDAs. We had to merge the 6 vitamin values; thus a food with 30% vitamin A, 30% vitamin C and 30% vitamin D, but no Bs, would score 90/600th, or 15%. For minerals we looked for calcium and iron percentages. Thus our bar graphs for

vitamins are based on a possible cumulative score of 600, and for minerals, 200. We took these new materials to the children.

Again, children fed back their reactions, and we listened carefully. A stylized robot/computer seemed most interesting to the children. That became our focus. During these experimental stages, Dr. Norma Feshbach developed the proper protocol and procedures. We wanted careful work, even under the tight time restraints.

Starting in September 1976, the Feshbach team went into the field. A number of specific questions guided the implementation of this phase of the investigation.

1. At what grade level can children remember and accurately reproduce the information presented in a food graphic, including number of calories, and proportions of protein, vitamins and minerals?
2. At what grade level can most children evaluate a food on the basis of an understanding that nutrients are good for the body and/or that too many calories are bad for the body?
3. At what age/grade level can children utilize two dimensions of the graphic (both calories and nutrients) to evaluate a food?
4. Is a graphic presentation of calories superior to a numeric presentation of calories in terms of children's performance?

5. At approximately what grade level do children begin to extract information from the graphic without an orientation/training session?

What follows is the research team's Report No. 2--A
Developmental Study of the Use of Graphics in Conveying Nutritional Information. Dr. Norma Feshbach, Tricia S. Jordon and Arline S. Dillman are the authors.

.....

Introduction

This phase of the project entailed the field testing of the graphic designed and developed for the purpose of this investigation. On the basis of findings generated in the exploratory and pilot study phases, a one-slide version of the NUTRITION COMPUTER was concluded to be the most effective mode of presentation.

The purposes of this phase were manifold:

1. To compare two different conditions (versions) of caloric display--one numeric, the other graphic;
2. To determine whether children, after exposure to a brief orientation/training session, can
 - a. remember, and reproduce the quantities presented in the graphic
 - b. interpret the graphic representation of quality
 - c. evaluate foods on the basis of graphic representations
 - d. consider more than one dimension in evaluation of food; and
3. To determine the approximate grade level at which children begin to be able to extract information from the graphic without prior exposure to a pre-orientation session.

Method

Subjects

The subjects for this phase of the study included 88 children, characterized as predominantly white middle class, ranging from four to ten years of age. The eight youngest children (the 4 year olds) were selected from a university nursery school while the remaining 80 children attended kindergarten through the fourth grade in a local elementary school in this same neighborhood. In all, there were eight children at age 4, and 16 children in kindergarten through fourth grade, equally divided as to sex.

Materials

The materials used in this study consisted of two sets of slides, (6 slides in all), two wooden models, and two sets of generalization pictures (a total of twelve pictures). All of these materials utilized a graphic, in the form of a stylized robot, placing food in its mouth.

Slides--In each slide, a picture of the food being ingested was clearly visible and positioned adjacent to the robot. The nutritional information of the food was displayed on the chest area of the robot. Proteins, vitamins, and minerals were computed as the percentage of the minimum daily requirement contained in one serving of the advertised food. These values were displayed as stripes on a horizontal bar graph, accompanied by the actual percentage figure. Each stripe on the bar graph represented 5% of the minimum daily requirement. The stripes were colored orange for protein, blue for vitamins, and yellow for minerals. The calorie information was displayed above these three bar graphs. For the Numeric Condition, the number of calories were represented as a numeral followed by the letters CAL. For the condition in which calories were graphically displayed, a jagged

green line on a horizontal bar graph with a range from 0 to 300 was used to represent the number of calories in a specific food. (See Appendix R)

A set of three slides, each slide representing one of three foods (hot dog, candy bar or portion of cereal) for each of the caloric representations (Numeric or Graphic) was prepared and used (making a total of 6 slides in all).

Models--Two wooden models of the NUTRITION COMPUTER robot, each representing one caloric indicator (numeric or graphic) were also constructed. The contents of the bar graphs could be changed by manipulating small wooden slides. (Appendix S, a photo)

Generalization Pictures--A set of six generalization pictures was prepared for each of the two calorie indicators. These consisted of the NUTRITION COMPUTER displaying the nutritional and caloric values for six hypothetical, unpictured foods. The values used are shown in Table I. Two pictures were considered to represent "good" foods (low caloric and high nutrient content), two pictures were considered to represent "bad" foods (high caloric and low nutrient content), and the remaining two pictures represented ambiguous foods (high caloric/high nutrient content and low caloric/low nutrient content), this latter category of generalization pictures requiring a more advanced level of cognitive comprehension.

TABLE I
VALUES FOR GENERALIZATION PICTURES; NUMBER
OF CALORIES AND PERCENTAGE OF MINIMUM DAILY
REQUIREMENT FOR PROTEIN, VITAMINS AND MINERALS

Picture	Condition I				Condition II and III			
	Cal	P	V	M	Cal	P	V	M
1	100	50%	100%	95%	90	55%	100%	95%
2	125	45%	100%	90%	100	45%	100%	95%
3	350	5%	10%	5%	290	5%	5%	10%
4	425	5%	5%	10%	260	5%	10%	5%
5	100	5%	10%	5%	80	5%	5%	10%
6	485	55%	95%	100%	290	50%	95%	100%

Design

Three treatment conditions were studied. The treatment variables were the mode of presentation of the caloric information on the NUTRITION COMPUTER and the presence or absence of an orientation session.

The graphic for Condition I (Numeric with Orientation) utilized a numerical representation of calories. Protein, vitamin, and mineral content were expressed both graphically and numerically in terms of the percentage of the minimum daily requirement for each nutrient contained in a standard serving of the food. An orientation session preceded the test session. Forty children were tested under Condition I: four girls and four boys at each grade level from kindergarten through fourth grade.

Condition II (Graphic with Orientation) utilized an identical format to Condition I for the representation of protein, vitamin and mineral content, i.e., both graphic and numeric. Calories, however, were represented graphically on a scale from 0 to 300, indicating the number of calories present in one serving of the food. An orientation session also preceded the test session. Thirty-two children were tested under Condition II: four girls and four boys at age 4 and at each grade level from kindergarten through grade two.

Condition III (Graphic without Orientation) utilized the same graphic as Condition II. However, the children did not participate in an orientation/training session. Sixteen children were tested under Condition III: four girls and four boys in grades three and four.

Age/grade levels for each Condition were selected to identify minimum age/grade for comprehension of the materials and concepts under each Condition.

The experimental design is presented in Table II and the distribution of subjects by Condition and age/grade level is presented in Table II.

TABLE II
EXPERIMENTAL DESIGN, SHOWING THE PROCEDURE
AND CALORIC REPRESENTATION FOR EACH CONDITION

<u>Condition</u>	<u>Procedure</u>	<u>Caloric Representation</u>
I	Orientation	Numeric
II	Orientation	Graphic
III	No Orientation	Graphic

TABLE III
DISTRIBUTION OF SUBJECTS FOR
EACH CONDITION AND AGE/GRADE
LEVEL

<u>Condition</u>	<u>4yr.</u>	<u>Age/Grade Level</u>				
		<u>K</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
I		8	8	8	8	8
II	8	8	8	8		
III	8				8	8
		8	16	16	16	16

Procedure

Each child was seen individually. Under Trial I the children in Conditions I and II participated in a short orientation/training session which included a brief discussion of the body's requirements for calories, protein, vitamins and minerals, as well as an explanation of the NUTRITION COMPUTER. This brief orientation was followed by the presentation of three slides representing the three foods. The slides were projected on a screen. The projected size of each slide was 19 inches diagonally. A voice overlay accompanied each slide, indicating the number of calories in one serving of the food. The child was given practice in reproducing the content of the slides using the wooden model of the graphic. The child was then asked to judge the generalization pictures

and to indicate the basis upon which the decision had been made. Feedback about the appropriateness of his/her responses was given throughout this orientation/training. This sequence constituted the children's first trial experience with the graphics.

Under Trial II the child's understanding of the graphic was then assessed. Each slide was presented for five seconds. After this 5 second period, the slide was removed and the child was then asked to evaluate the food and to explain his/her evaluation. The generalization pictures were then presented, again requiring the appropriate sorting. This second sequence of activities is referred to as Trial II. The protocol for this procedure appears in Appendix .

Children in Condition III did not participate in the orientation/training session. They were told to imagine that the projected picture followed a TV commercial about particular food. They were then asked to reproduce and evaluate the slides and to evaluate the generalization pictures as in Trial II of Conditions I and II above.

RESULTS

Content Reporting/Reproduction

Data relevant to the questions presented above were analyzed. The first question was, "At what grade level do most children remember and accurately reproduce the information presented (number of calories; proportion of protein, vitamins, and minerals)?" The data for calorie reproduction of the figures on the slides for the three foods for Trial 2 are presented in Table IV. The total number of correct responses by condition for each age/grade level is indicated. A response was judged correct if the child verbally reported the exact number of calories or if a child's graphic reproduction

on the wooden model was ± 10 calories of the correct number. Each child responded to three slides; eight children were tested in each age level. Therefore, the total possible correct responses for each grade level tested under each condition is twenty-four.

TABLE IV
NUMBER AND PERCENTAGE OF CORRECT CALORIC REPRODUCTIONS
(EITHER VERBAL OR GRAPHIC) FOR ALL CONDITIONS AND AGE/
GRADE LEVELS

Age/Grade level	Condition					
	I		II		III	
	N	%	N	%	N	%
4yr	8	33.0	11	45.8		
K	8	33.0	9	37.5		
1	15	62.5	14	58.3		
2	13	54.1	15	62.5		
3	13	54.1			7	29.1
4	15	62.5			13	54.1

An examination of the percentage of correct responses indicates that, with an orientation session (Conditions I and II), more than half the responses were correct for children from first through fourth grades. Without an orientation session (Condition III), this level was not achieved until fourth grade.

Examination of the number of children correctly reproducing the number of calories for at least two of the three foods (Table V) also indicates that from the first grade through the fourth grade, with an orientation, half or more of the children were able to reproduce the correct calorie number for the presented foods. Without the orientation, this level was achieved in the fourth grade.

TABLE V
NUMBER OF CHILDREN CORRECTLY REPRODUCING
CALORIC INFORMATION FOR 0, 2 OR 3 FOODS,
FOR ALL CONDITIONS AND AGE/GRADE LEVELS

Age/ Grade	CONDITION I Numeric/ Orientation				CONDITION II Graphic/ Orientation				CONDITION III Graphic/ Non-orientation			
	0	1	2	3	0	1	2	3	0	1	2	3
4yr.					2	3	1	2				
K	4	1	2	1	1	5	2	0				
1	1	1	4	2	1	2	3	2				
2	2	2	1	3	1	2	2	3				
3	2	2	1	3					2	5	1	0
4	1	1	4	2					2	0	5	1

The data for reproduction of protein, vitamins, and minerals are presented in Table VI. These data appear in the form of error scores. The absolute difference between the number of stripes for each child's response, as shown on the wooden model or verbally reported, and the correct response, as shown on the slide, was calculated for each food for protein, vitamin, and mineral content. These scores were averaged for each age/grade for each condition. In cases where a child did not respond to a request for reproduction of protein, vitamins, or minerals for a food, an error score of 10 was assigned. Means for combined error scores of protein, vitamin, mineral responses for each age/grade were computed.

TABLE VI
MEAN ERRORS IN REPORTING PROTEIN, VITAMINS AND MINERALS
BY AGE/GRADE LEVEL AND CONDITION (ERRORS DETERMINED BY
THE ABSOLUTE DIFFERENCE BETWEEN THE NUMBER OF STRIPES
ON THE SLIDE PRESENTED AND THE NUMBER OF STRIPES REPORTED
BY THE CHILD)

<u>Condition I</u> Numeric/ Orientation		<u>Age/Grade</u>					
	<u>Nutrient</u>	4yr.	K	1	2	3	4
	P		2.16	1.58	.54	.27	.27
	V		3.41	2.33	.79	.62	.56
	M		2.79	1.50	.75	.64	.79
	$\bar{X}$		2.99	1.80	.69	.51	.54

<u>Condition II</u> Graphic/ Orientation						
	P	2.90	1.83	2.95	1.45	
	V	3.00	2.04	2.58	1.04	
	M	3.08	3.12	2.86	1.95	
	$\bar{X}$	2.99	2.33	2.79	1.48	

<u>Condition III</u> Graphic/ Non-orientation					
	P			7.00	3.87
	V			5.91	3.66
	M			6.83	3.83
	$\bar{X}$			6.58	3.78

The table indicates that errors were generally low, suggesting that even the youngest children can reproduce the information regarding proteins, vitamins, and minerals. (The mean error for four-year-olds was 2.99 stripes out of a possible maximum mean error score of 17.88) In addition, a developmental trend for each condition is suggested. The older children for each condition were more accurate than the younger children.

Understanding of Calories and Nutrients

The second question considered children's understanding of nutrients and calories: "At what grade level can most children evaluate a food on the basis of an understanding that nutrients are good for the body and/or that too many calories are bad for the body?" Evidence for this understanding comes from an analysis of the children's judgments of the unambiguous generalization pictures. This data is presented in Table VII.

TABLE VII
NUMBER OF CHILDREN CORRECTLY EVALUATING
THE UNAMBIGUOUS GENERALIZATION PICTURES
ON TRIALS I AND II FOR ALL CONDITIONS
AND AGE/GRADE LEVELS

Age/Grade	Condition					
	I		II		III	
	Trial 1	Trial 2	Trial 1	Trial 2	Trial 1	Trial 2
4yr			2	6		
K	3	7				
K	3	7	4	7		
1	6	7	7	7		
2	5	6	8	7		
3	8	7				2
4	6	6				6

For conditions I and II, at least 75% of the children at all age/grade levels correctly judged the pictures on the second trial. (Given a generalization picture, and asked if the food was a "good" food for your body or a "bad" food, 3/4 of the children answered correctly.) The youngest children (four-year-olds and kindergartners) showed improvement from trial one to trial two. The third graders in Condition III performed at a lower level than third graders in Condition I, while the fourth graders were identical across Conditions.

Calorie/Nutrient Relationship

The third question was designed to tap an understanding of the calorie/nutrient relationship: "At what age/grade level can children utilize two dimensions of the graphic (both calories and nutrients) to evaluate a food?" Data to support the existence of an understanding of this interrelationship was drawn from the children's verbal responses regarding the justification of their evaluation of a food. These responses were primarily to the generalization pictures, especially to pictures five and six, the ambiguous foods (high calories/high nutrients and low calories/low nutrients). Each child was rated by three experimenters as to his/her understanding of this interrelationship. Typical positive-rated responses were:

- "So much calories is bad, but so much of protein, vitamins and minerals is good." (picture 6, first grader, Condition I)
- "It's not as good as (food) 1 because of the calories." (picture 6, third grader, Condition I).
- "Too many calories, but these (protein, vitamins, minerals) are good." (picture 6, four-year-old, Condition II)
- "Calories are OK; protein, vitamins, and minerals are too little." (picture 5, four-year-old, Condition II)

The data are presented in Table VIII.

TABLE VIII
NUMBER OF CHILDREN USING BOTH CALORIE AND
NUTRIENT INFORMATION IN EVALUATING THE GRAPHIC
REPRESENTATION OF FOODS

<u>Age/Grade</u>	<u>Condition</u>		
	I	II	III
4yr.		5	
K	0	5	
1	1	7	
2	4	8	
3	4		1
4	5		5

The results clearly indicate that children in our sample as young as four years (in Condition II) were able to comprehend the calorie/nutrient relationship. In addition, more younger children in Condition II evidenced understanding of the calorie/nutrient relationship than in Condition I.

Graphic v. Numeric Calorie Display

The fourth question dealt with the mode of display of the calorie figure: "Is a graphic presentation of calories superior to a numeric display of calories?"

Data from Condition I (numeric) was compared with data from Condition II (graphic).

A comparison of the calorie reproduction data (Tables IV and V above) indicates very similar numbers of children and percentages of correct responses for the two conditions. Protein/vitamin/mineral reproduction (Table VI) appears to be slightly more accurate for Condition I than for Condition II. The data indicating understanding of use of calories or nutrients as single dimensions for evaluating foods (Table VII) also shows no differences between Conditions I and II.

The dramatic difference is in the area of understanding the calorie/nutrient relationship (Table VIII). Based on this analysis, the graphic representation of calories was judged to be superior to the numeric mode of presentation.

Use of Orientation/Training

The final question dealt with the effect of the orientation/training session: "At what grade level do children begin to extract information from the graphic without an orientation/training session?" The data from Condition III was compared with Condition I.*

For calorie reproduction (Table IV), the third graders in Condition III (no orientation) gave fewer correct responses than those in Condition I (orientation). The difference in the fourth graders was not as great. The number of third grade

* It should be noted that the mode of presentation of calories was also different for these conditions.

children correctly reproducing the calorie figure (Table V) is lower in Condition III, but the figures for fourth grade children are identical.

The reproduction of Protein, vitamins, and minerals (Table VI) is less accurate for both third and fourth graders in Condition III than third and fourth graders in Condition I.

The evaluation of the generalization pictures (Table VIII), a measure of understanding calories and nutrients as separate dimensions for judging foods was poorer for third grade children in Condition III than for third graders in Condition I. For the fourth grade, the numbers of children in Conditions I and III correctly evaluating the foods was identical. Similarly, the number of children understanding the calorie/nutrient relationship was lower for Condition III third graders than for Condition I third graders, while the fourth grade figures are identical.

These data indicate that at the third grade level, children in our sample were beginning to extract some relevant information from the graphic without an orientation. By the fourth grade, the level of understanding was the same for both conditions, although the protein/vitamin/mineral reproduction was poorer for those children who did not receive an orientation.

Children in our sample, using the materials and procedures as outlined above, were easily able to utilize the graphic representation of caloric and nutrient content to evaluate foods. With the orientation/training session, children at all age/grade levels tested were able to remember and reproduce the proportion of protein, vitamins, and minerals with little error. Over one-half the children from grades one through four could reproduce caloric content. Children at all age/grade levels tested could utilize at least one dimension (nutrients and/or calories) to evaluate foods.

With a graphic caloric display, even the youngest children in our sample were able to understand and utilize the complex calorie/nutrient relationship to evaluate foods. The graphic representation of calories was judged superior to the numeric representation because of this positive effect on understanding the calorie/nutrient relationship.

Without the orientation/training session, children at the third grade level were beginning to extract some relevant information, but were lower in both reproduction of information and in understanding of concepts than children who had experienced an orientation/training. The only observable effect of the orientation for the fourth grade children was a small superiority in reproduction of protein, vitamins, and minerals.

Several levels of understanding are represented by this data. The reporting/reproduction of caloric, protein, vitamin, and mineral content demonstrates ability to match and to discriminate. It does not necessarily give evidence for understanding the concepts.

The use of caloric and/or nutrient information to judge foods is indicative of some understanding of the concepts of calories and nutrients. The data (Table VIII) suggests that older children demonstrated this level of understanding in the first trial with the generalization pictures, while the younger children (four-year-olds and kindergarteners) required two trials.

Further, children in the youngest group sampled (four years) were able to understand the complex relationship of calories and nutrients and base judgments on these two factors. This is a very sophisticated level of understanding. The graphic mode of presentation for calories improved performance at this level, but was also associated with a slight increase in errors in protein/vitamin/mineral reproduction.

The protein/vitamin/mineral reproduction was more accurate in Condition I than in Condition II. We may speculate that because the calories were less salient in Condition I, more attention was paid to the protein/vitamin/mineral display, thus leading to greater accuracy in reproducing this information.

In summary, children in our sample were clearly able to learn to understand and use the information presented in a graphic form to make judgments about food. A developmental trend is suggested by the data. The younger children were less accurate in reporting/reproducing the information and required two trials to accurately evaluate foods on the basis of at least one dimension. The most important finding is that children at all age levels in our sample were able to learn to comprehend the complex relationship of calories and nutrients and use both these dimensions in evaluating foods.

This preliminary study should not be considered as a definitive statement of the best or only way to present nutritional information to children in a graphic form. This study does, however, present evidence that young children can learn and utilize nutritional information presented graphically.

FOLLOW UP PROCEDURE

Approximately one week after the initial field situation, children in the kindergarten, first and second grades were retested on a set of generalization stimuli. The latter consisted of three previously administered and six new generalization pictures. During this procedure no slides were administered nor was any instruction, explanation or assistance provided to the children.

Purpose

The purpose of the retest was to determine whether young children who had been previously exposed to nutritional information, could apply this information at a later date to new combinations of food values. (Six new pictures) Only children who participated in Condition II, (graphic indicator of calories with orientation) were administered the retest. (One child was absent at each grade level during the retest, resulting in a sample of 21 children.)

Results

The results are quite striking. For the six unambiguous stimuli, which clearly can be classified as either a bad or good food, of the total 126 administered stimuli, 114 or 90% were correctly classified. Only one kindergarten child was unable to classify correctly at least four of the six stimuli. Six of the seven, second graders, five of the seven first graders, and five of the seven kindergarteners correctly labeled all of the six pictures appropriately.

An analysis of the extent to which the children understood the calorie/nutritional food value relationship reflected an impressive degree of understanding. One can infer that the children had apparently learned the principal during the field test a week earlier. Six of the second graders, six of the first graders and five of the kindergarten age children understood good foods had high nutrients relative to their caloric value while poor foods had low nutrients relative to their caloric value. The children similarly conveyed the understanding that too many calories can be "bad for your body."

Conclusion

The retest results provide rather impressive evidence of the feasibility of utilizing a graphic, of the type tested in this study, to communicate to young children, the nutritional value of food products advertised on television.

.....

Thus we have the report of the research team. In all of this we merely sought the potential for graphic portrayal of nutrition information. We do not claim to have found the best graphic; we do not claim to have analysed every variable within the graphic concept; we do not claim to have the sole idea for communicating to children. We realize the FTC has contemplated graphics elsewhere. We realize our graphic plan would gain from PSAs explaining basic nutrition concepts.

Obviously, graphic communication of relative nutritional worth can provide children with some basis for judging and selecting a food.

Under optimum conditions the perfect graphic would reach down to 4-5 year olds as well as to older children; it would convey up to seven nutritional facts for prudent food selection; it would be meaningful in print as well as video form; it would be acceptable to parents as well as nutrition educators. Most of these goals are testable in clinical settings.*

Some of the goals may have to await professional consensus; certainly the priority of nutritional facts useful for children should be an early subject of discussion. Other pointers which await national consensus include optimum protein, carbohydrate and fat content proportions; the risks of various types of fat consumption; and optimum nutrient levels. While these discussions take place we feel secure in recommending that children be alerted to the nutritional density of foods -- the caloric content compared with the protein, vitamin and mineral worth.^{28/} This is where 437.8 becomes important.

Assuming that a nutritional graphic can be standardized to represent the calorie/nutritive value of hundreds of foods, and assuming it appears in television food advertisements, children will ask questions in the beginning. A supportive campaign in pre-schools and schools would be particularly helpful. PBS and Sesame Street could

* For an excellent summary of the research most relevant in this area we note the paper of Laurene Meringoff entitled "The Effects on Children of Television Advertising". Unpublished, available from the Harvard Graduate School of Education, 1976.

* See also Research Paper of Susan Kennedy completed in partial fulfillment of course requirements for Individual and Family Studies (IFS 529), Advanced Child Development Seminar, Penn. State University, Feb. 1976.

help explain. PSAs on commercial television could also help -- as would a back-of-the box cereal industry effort. After children have seen their first 500 such graphic symbols, we would presume that the information represented in those symbols could become a bit more sophisticated, for siblings will pass the word down, and the older children will pass the word to their elders. As each stage of sophistication is changed, the graphic should be pre-tested and post-tested for its meaning to children. While we have confidence in children's ability to learn sophisticated systems through multiple exposure -- witness their ability to understand Monopoly or batting/pitching averages -- we believe adults can make gross misjudgments of how children learn, and hence we ask for pre-testing.

We suggest this method of communication can teach our children to help us select foods. Thus it would be wise to include adults in some of the pre and post testing.

GOVERNMENT CHALLENGE

We interact frequently with several regulatory agencies, including the Food and Drug Administration, the Federal Trade Commission, the Federal Communications Commission, and the Product Safety Commission. We are familiar with many departments within USDA and HEW. The apathy toward children in the highest levels of some of these agencies is dumb-founding. Children under 12 make up approximately 20 percent of our population. They are entering into the adult world

at even earlier stages. A government has the responsibility to protect those who cannot protect themselves, and children may be the largest vulnerable group in our entire population. Why then this disregard of children today in the world of commerce? The behavioral scientists can show us how to cope with their special needs.

Through the meshing of professional insights of the behavioral scientists with the legal perceptions of members of the bar, it should be possible to update commercial and regulatory law to cope with the present condition where adult executives are selling directly to and through children.

We feel the FTC can be the leader in this awakening; we feel the proposed Food/Nutrition Rule is the place to start.

TECHNICAL RECOMMENDATIONS

We make the following recommendations to the Federal Trade Commission to carry out the Goals and views expressed in this paper. For this Phase I consideration, we honor the general triggering conditions of the Rule--Phase I--as written with the following amendments and alterations (see brackets) in the proposed TRR:

Section 437.1 (g) Re Definitions: "Clearly and Conspicuously Disclose":

- (1) Disclosing in a manner which can be easily understood (in the case of television and print advertising, also easily seen and read) by the casual observer, listener or reader among members of the public [children as well as adults] and which conforms ...

Section 437.2 (d) "Calories"

The energy content of a food shall be stated [or represented to children and adults] in calories per serving [or serving size per unit of calories], expressed to the nearest ...

Section 437.2 (g) Re "Television advertisements--method and form of disclosures":

... requirement for such disclosure. [Furthermore, each such advertisement for each product shall conclude with a nutritional graphic display of not less than 5 seconds duration, or 16% of the commercial's length, whichever is the longer, in the left side portion of the screen--the total area of the graphic to be not less than 1/4 the size of the total video picture. The setting of the graphic shall maximize the graphics' message.]

Section 437.2 (h) "Print advertisements method and form of disclosures":

(1) Any disclosure in a print or display advertisement shall be prominently displayed in [graphic form and in] any sans serif type style consistent with the requirements set forth in §437.1(g)(1) and herein below, but in no event condensed type ...

[(6) The nutritional graphic display shall be of proportional size and observability as the aforesaid print declarations.]

Section 437.8 (a)-(d) Energy and Calorie Claims

(d) ... and conspicuously disclosed.

[(e) In addition to the above, any advertisements which by any audio or video means convey to typical children that consumption or use of the food will produce or provide a feeling of satiety, fullness, being filled, diminution of appetite, general vigor, sustained energy or alertness, strength or endurance, if shown to an audience which includes over 2,000,000 children under 12, or an audience made up of at least 20% children under 12, whichever is the first condition, shall be accompanied by a nutrition graphic symbol exhibited as described in § 437.1(g) and 437.2(g), as amended, combining caloric and nutrient information.]

Section 437.10 "Health and Related Claims"

[(c) A food shall not be represented in advertising as bringing by and of itself health unless the advertisement contains a nutritional graphic expressing the relationship between the calories and nutrients represented in the food.]

CONCLUSION

The FTC food/nutrition rule can benefit children. They absorb many food messages each year from television. They are left vulnerable by the exclusion of caloric and nutrient information in today's food advertising. Through graphic symbols even young children can gain nutritional information from food commercials. With the assistance of behavioral scientists, government regulators and private industry can develop standards for more educational and equitable advertising in front of children. Standards can be pre and post tested with children and their parents to ensure results. Children thus soon may be able to communicate to their elders about food values, and in so doing, as expressed so eloquently by Senator Hubert Humphrey when discussing ways to educate the population along nutritional lines . . . "Perhaps a little child shall lead them."

REFERENCES CITED IN CHOATE TESTIMONY
IN THE FEDERAL TRADE COMMISSION'S HEARINGS ON
THE PROPOSED TRADE REGULATION RULE ON
FOOD/NUTRITION ADVERTISING

- 1/ Choate, Robert B., "A Presentation to the National Association of Broadcasters Television Code Review Board," May 26, 1971.
 - 2/ Winick, Charles, Williamson, Lorne G., Chuzmir, Stuart and Winick, Mariann, "Children's Television Commercials--A Content Analysis," (New York: Praeger, 1973), pg. 4.
 - 3/ Liebert, Robert M., in a statement before the United States House of Representative's Subcommittee on Communications of the Committee on Interstate and Foreign Commerce, Serial No. 94-53, July 16, 1975.
 - 4/ Choate, Robert B., "Sweeteners--A Technology Assessment," a presentation before the American Chemical Society Symposium, April 8 & 9, 1976.
 - 5/ Liebert, Robert M., and Poulos, Rita, "Unintentional Negative Effects of Food Commercials on Children: A Case Study," MARC, Inc., 1975.
- Ward, Levinson, and Wackman, "Children's Attention to Television Advertising," E. A. Rubenstein, G. A. Comstock, and J. P. Murray (Eds.) Television and Social Behavior; Volume 4, Television in Day-to-Day Life: Patterns of Use; Washington, D.C., G.P.O. 1972.
- Atkin, Charles K., "The Effects of Television Advertising on Children: Summary Abstracts of Eight Research Investigations," 1975.
- 6/ Briggs, G., and Ullrich, H., "The General Public," in U.S. Nutrition Policies in the Seventies, 1973.
 - 7/ Farquhar, John W., Hirsch, Jules, and Stunkard, Albert J., "Obesity and Nutrition (Position Paper)," prepared for the Senate Committee on Nutrition and Human Needs, June 19-21, 1974.
 - 8/ Heinz, Henry J., II, Impact of Science on Society, Vol. XXIV, No. 2; 1974.
 - 9/ U.S.D.A. Booklet, ARS 62-17, Table 20, 1968.
 - 8/ Heinz, loc. cit.
 - 10/ Robertson, T. S. and Rossiter, J.R., "Children and Commercial Persuasion: An Attribution Theory Analysis," Journal of Consumer Research, 1974, 1, 13-20.
 - 11/ Federal Communications Commission, "Children's Television Programs--Report and Policy Statement," Volume 39, Number 215, Part II, November 6, 1974.
 - 12/ "Fairness Doctrine and Public Interest Standards, (Fairness Report)," 39 Fed. Reg. 26372 (July 18, 1974) re: FCC Docket # 19260, para. 71-76. (FTC statement to FCC re Docket No. 19260 available at FTC, and CCMM offices.)
 - 13/ Council on Children, Media and Merchandising complaint to Federal Communications Commission re: Council on Children, Media and Merchandising v. CBS & ABC; 59 FCC 448, April 14, 1976.

- 14/ Final Report, White House Conference on Food, Nutrition and Health, December, 1969.
- 15/ "Television and Social Behavior," Volumes I - V, Government Printing Office, 1972.
- 16/ Gerbner, George, and Gross, Larry, "The Scary World of TV's Heavy Viewer," Psychology Today, April, 1976, Volume 9, #11.
- 17/ Sharaga, Susan Joy, "The Effect of Television Advertising on Children's Nutrition Attitude, Nutrition Knowledge and Eating Habits," A thesis presented to the faculty of the Graduate School of Cornell University, August, 1974.
- 18/ Nevill, Gayle, "The Impact of Television Advertising on Children's Food Opinions and Practices--An Exploratory Study," a thesis presented to the faculty of the Graduate School of Cornell University, May, 1973.
- 19/ Dussere, Sally, "The Effects of Television Advertising on Children's Eating Habits," a thesis presented to the Department of Health at the University of Massachusetts,
- 20/ Lehmann, Donald H., "Nutritional Knowledge, Attitudes and Food Consumption Patterns of U. S. Female Heads of Households," Research Paper No. 121 for the Food Research Center of Columbia University, 1976.
- 21/ Liebert, Robert M., Liebert, Diane E., Sprafkin, Joyce N., and Rubinstein, Eli A., "Effects of Television Commercial Disclaimers on the Product Expectations of Children, Occasional Paper 76-8, Brookdale International Institute, Stony Brook, New York.
- 22/ "Children's Television Programs--Report and Policy Statement," loc. cit.
- 23/ Letter from Gerald Thain, Professor, Georgetown University Law Center, to James V. De Long, Assistant Director for Special Projects, Federal Trade Commission, August 17, 1976.
Tape.
- 24/ Information received in telephone conversation with National Association of the Deaf.
- 25/ "Language Usage in the United States: July, 1975," U.S. Department of Commerce, Bureau of the Census, Current Population Reports Series P-23, #60.
- 26/ Final Report, White House Conference on Food, Nutrition and Health, December, 1969.
- 27/ Whitford, William, "The Functions of Disclosure in Consumer Transactions," Wisconsin Law Review, p. 400, 1973.
- 28/ Hansen, R. Gaurth, Sorenson, Ann W., Wyse, Bonita W., and Wittwer, Arthur J., "Using the Nutrient Density Index of Nutritional Quality to Determine Guidelines for Fair Advertising Practices," Utah State University, April 30, 1976.

APPENDICIES TO R. CHOATE TESTIMONY

- A.....Previous testimony before Washington hearings
- B.....Partial Chronology of R. Choate 1965-1976
- C.....A.C.Neilsen report to Senator Moss
- D.....C.B.S. Memorandum
- E.....Sucrose content of Cereals
- F.....Cereal Advertising Budgets
- G.....Letter from Abraham Nizel, D.M.D. re sucrose and teeth
- H.....Office of Child Development paper to FTC
- I.....Eleven sample storyboards
- J.....Kellogg storyboard
- K.....Pet Food Advertisements
- L.....Calculations of Number of Advertisements for Edibles seen by Children
- M.....Legal Aspects of Children's Rights in the Marketplace
- N.....Graphic Examples
- O.....New Mexico Nutrition Improvement Program storyboards
- P.....Vitas of Drs. Norma and Seymour Feshbach
- Q.....Report No. 1 of N. Feshbach, T. S. Jordan and A.S. Dillman
- R.....Experimental Graphics for Testing on Children
- S.....Three dimensional toy showing nutrition graphic

REFERENCES TO CHILDREN
IN
PREVIOUS TESTIMONY
BEFORE THE
FEDERAL TRADE COMMISSION
HEARINGS ON
THE PROPOSED TRADE REGULATION RULE
ON FOOD/NUTRITION ADVERTISING

<u>DATE</u>	<u>SPEAKER</u>	<u>TRANSCRIPT PAGES</u>
July 12	Dr. George M. Briggs	41
	"	67-68
	"	103
	"	107
	"	
July 12	Ms. Barbara Erickson	161
July 13	Dr. Henry A. Jordan	222
July 14	Mr. Barney H. McClure	453-456
July 19	Dr. William E. Connor	877
July 19	Ms. Margaret C. Phillips, M.S.	1464-1470
July 23	Dr. Rachmiel Lavine	1532
September 13	Jay Tepperman, M.D.	1603
	"	1610-1611
	"	1642-1643
	"	1649-1650
September 14	Ms. Sheila Sidles	1772
	"	1847
	"	1849-1852
	"	1869
	"	1871
	"	1873
September 15	Dr. Robert W. Wissler, Ph.D., M.D.	2036
September 15	Dr. Fred Kummerow, Ph.D.	2048
September 16	Maxine M. Burch	2344
September 17	Dr. Charles K. Atkin, Ph.D.	2607-2650
October 12	Dr. Anthony Gotto	In Press
October 12	Dr. George Owen	"
October 13	Dr. Edwin L. Bierman	"
October 13	Dr. Robert Ely Shank	"
October 13	Dr. George T. Bryan	"
October 14	Gail Harrison, PhD.	"
	Plus	
November-December	Washington Witnesses	

PARTIAL CHRONOLOGY OF R. CHOATE
ACTIVITIES RELATED TO FOOD

- Pre 1965 -- Operator of fruit juice company; farm developer in California and Arizona; food purchasing agent for underprivileged children's camp
- 1965 -- Director, National Conference on Poverty in Southwest
- 1966 -- Initiator of analysis of hunger in U.S. for Citizens Crusade Against Poverty
- Consultant to Senate Committee on Labor and Public Welfare
- 1967 -- Consultant to Senator Stennis on amendment creating OEO's Emergency Food and Medical Services and HEW's 10 State National Nutrition Survey
- Late 60s -- Consultant to OEO National Office on Emergency Food and Medical Services; consultant in Arkansas, New Mexico, Texas, on food delivery problems
- Consultant to USDA on school lunch reform
- Instigator (with others) of Senate Select Committee on Nutrition and Human Needs
- Surveyor on medical and health services in New Mexico with Dr. Paul O'Rourke
- Researcher - "Hunger, U.S.A." - Topic: Analysis of Role of Private Sector in Alleviating Hunger
- Consultant to USDA on reforms needed in commodity and food stamp program
- Surveyor of performance of food programs on Indian Reservations
- Organizer - Ad Hoc Committee on Hunger
- 1968-1969 -- Consultant to Secretary Robert Finch, Department of HEW
- Consultant to Dr. Jean Mayer, Director, White House Conference on Food, Nutrition and Health
- Staff member, White House Conference on Food, Nutrition and Health
- 1969 -- Speaker, GMA's American Food Forum
- Speaker, "Cereal Science and Nutrition" - American Association of Cereal Chemists
- Co-organizer, two seminars in New York City with nation's top communicators on subject of nutrition education

- 1969
- Participant, FDA planning sessions on food labeling
 - Participant, conference on nutrient values of fresh fruits and vegetables, hosted by the food industry - San Diego
- 1971
- Speaker - "Why is There a Crisis of Confidence in our Food Supply?" -- Food Update 10 - San Diego
 - Speaker - "Food Professionals--Are They Dietary Delinquents?" -- Four Corners Regional Dietetic Association
 - Proposer - A Code for Advertising Edibles, Meeting of Citizens Board of Inquiry into Hunger and Malnutrition
 - Author - Letter sent to 325 private companies re food advertising
 - Petitioner to National Association of Broadcasters for a Code of Advertising for Edibles (petition rejected)
- 1972
- Participant, workshop, "Exploring the Frontiers of Massive Nutritional Education", sponsored by Organization of American States and Latin American Nutrition Society -- Lima, Peru
 - Speaker, Safeway Annual Meeting of Store Managers, D.C. Division
 - Participant, Food Advertising on TV-Seminar, sponsored by Advertising Age
 - Speaker, Advertising Age 15th Annual Creative Workshop
 - Producer, three public service pro-nutrition announcements for airing over 100 TV stations to child audiences
 - Consultant, OEO TV project on nutrition education for multi-language area - New Mexico
- 1972
- Participant, Consumer Conference of National Association of Food Chains
 - Conferee, Conference on Nutrition Education, Guadalajara, Mexico, sponsored by International Union of Nutritional Sciences
 - Participant, various Food Update seminars
- 1973
- Petitioner to FTC for a children's advertising code
 - Participant, FTC meetings convened to explore with advertisers and broadcasters the content of a possible children's advertising code
 - Petitioner to ABC, CBS, NBC on consumer education on advertising practices

- Testifier before Senate Commerce Committee on "The Selling of the Child" - a report on industry research practices on children and advertising
- "Impact on the Food Industry, Selling Food - American Style". A dialogue with Paul Khan, ITT Continental Baking before 21st Annual Food Technology Conference
- Speaker, Women's Auxiliary to American Dental Association
- Mid 70s -- Participant, seminar leader on advertising, Council on Consumer Organizations 1974, 1975, 1976
- 1974-1975 -- Instructor, Wharton School of Business, Philadelphia
- 1975 -- Conferee, Committee on Nutrition, American Academy of Pediatrics
- Consultant, World Food Conference, Rome, Italy
- Presentor: American Chemical Society Symposium on Sugar
- Participant, Conference on Sweeteners, National Academy of Sciences
- Petitioner to FCC and FTC on advertising practices to children
- Participant, Conference on Television and Children, Priorities for Research, Reston, Virginia
- 1976 -- Appointed member, National Advisory Committee on Food and Drug Administration
- Participant, Mt. Sinai Convocation on Prevention of Disease through Optimal Nutrition
- Testifier, New York State Assembly Task Force on Food and Farm Policy
- Participant - Workshop on "The Conceptualization and Measurement of Consumer Satisfaction and Dissatisfaction"
 - Marketing Services Institute
- Audience member at FTC TRR hearings on food and nutrition
- Invited member, Visiting Committee on the Food and Nutrition Board, National Academy of Sciences



A.C. NIELSEN COMPANY

APPENDIX C

MEDIA RESEARCH DIVISION ☐ NIELSEN PLAZA ☐ NORTHBROOK, ILLINOIS 60062 ☐ (312) 498-6300

March 18, 1976

Senator Frank E. Moss
Chairman, Consumer Subcommittee
Committee on Commerce
United States Senate
Washington, D.C. 20510

Dear Senator Moss,

In further response to your letter dated February 4, 1976,
I enclose the following:

- (1) NSI Children's Viewing Study - Ranking Report
(November 1975 data for the 10 markets involved
in the May 1974 report of the same title, with
the addition of the Salt Lake City market in
this '75 report).
- (2) Special Supplement to the above report, providing
'73-'74 trend data for Salt Lake City which was
not measured in previous Children's Viewing Stud-
ies.

OMITTED
10/25/76

If we can be of further help, please let us know.

Cordially,

James D. Lyons
Executive Vice President

JDL:bp

cc: A. C. Nielsen, Jr.

NIELSEN STATION INDEX **CHILDREN'S VIEWING** **STUDY —**

Ranking **Report**



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November, 1975



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NIELSEN STATION INDEX

THE PERSON AUDIENCE ESTIMATES SET FORTH IN THE CHILDREN'S VIEWING STUDY-RANKING REPORT HAVE BEEN DERIVED FROM THE NOVEMBER 1975 NIELSEN STATION INDEX REPORTS FOR THE ELEVEN MARKETS INVOLVED IN THIS STUDY.

THESE AUDIENCE ESTIMATES ARE BASED UPON PROJECTIONS FROM NIELSEN SURVEY MEASUREMENTS MADE IN THE MANNER DESCRIBED IN NSI REPORTS AND SUBJECT TO THE DEFINITIONS AND REMINDERS SET FORTH THEREIN. ADDITIONAL COPIES OF THESE DEFINITIONS AND REMINDERS WILL BE FURNISHED ON REQUEST.

CHILDREN'S VIEWING STUDY - RANKING REPORT

INTRODUCTION

THIS REPORT PROVIDES A RANKING OF THE TOP TWENTY PROGRAMS, BASED ON THE STATION TOTAL VIEWING OF CHILDREN SIX TO ELEVEN, IN ELEVEN MARKETS. THE ESTIMATES ARE DERIVED FROM THE PROGRAM AUDIENCE AVERAGES SECTION OF THE NOVEMBER 1975 VIEWERS IN PROFILE REPORTS FOR THE FOLLOWING MARKETS:

AUGUSTA
DENVER
EVANSVILLE
GREENSBORO-HIGH POINT-WINSTON SALEM
NASHVILLE
NEW YORK

SALT LAKE CITY
SAN DIEGO
SPOKANE
TYLER, TEXAS
WASHINGTON, D. C.

PROGRAMS THAT WERE SCHEDULED FOR AT LEAST FOUR DAYS A WEEK ARE INCLUDED AS AN AVERAGE OF FOUR, FIVE OR SIX DAYS. THE FIVE DAY AVERAGE IS DENOTED BY ONE ASTERISK, THE SIX DAY BY ONE CROSS, AND THE FOUR DAY BY TWO CROSSES. OTHER PROGRAMS WHICH WERE SCHEDULED FOR A MINIMUM OF FOUR DAYS DID NOT QUALIFY AS AN AVERAGE. FOR THESE, THE HIGHEST-RANKED DAY WHICH DID QUALIFY IS INCLUDED AND IS DENOTED BY TWO ASTERISKS.

FOR EACH PROGRAM, ITS RANK, NAME, STATION, AFFILIATION, DAY, TIME AND STATION TOTAL AUDIENCE (CHILDREN 6-11) ARE INCLUDED.

AFFILIATION CODES ARE AS FOLLOWS:

A - AMERICAN BROADCASTING COMPANY
C - COLUMBIA BROADCASTING SYSTEMS
N - NATIONAL BROADCASTING COMPANY
IND - INDEPENDENT STATION

MARKET: NOVEMBER 1975
AUGUSTA

RANK	PROGRAM	STATION	AFFILIATION	DAY	TIME	STATION TOTALS (000)
						CHILDREN 6-11
1	6 MILLION \$ MAN	WJBF	A-N	SUN	8:00-9:00 PM	30
2	BATMAN	WRDW	C	MON-FRI*	4:00-4:30 PM	24
3	WELCOME BACK, KOTTER	WJBF	A-N	TUE	8:30-9:00 PM	20
4	HAPPY DAYS	WJBF	A-N	TUE	8:00-8:30 PM	19
4	SWISS FAMILY ROBINSON	WJBF	A-N	SUN	7:00-8:00 PM	19
4	THE WALTONS	WRDW	C	THU	8:00-9:00 PM	19
7	GOOD TIMES	WRDW	C	TUE	8:00-8:30 PM	18
7	WILD KINGDOM	WRDW	C	SAT	7:30-8:00 PM	18
9	HEE HAW	WJBF	A-N	THU	7:00-7:30 PM	17
9	PRICE IS RIGHT	WJBF	A-N	TUE	7:00-7:30 PM	17
9	S.W.A.T.	WJBF	A-N	SAT	9:00-10:00 PM	17
12	ANDY GRIFFITH	WRDW	C	SAT	7:00-7:30 PM	16
12	THE JEFFERSONS	WRDW	C	SAT	8:00-8:30 PM	16
14	ANDY GRIFFITH	WRDW	C	WED**	5:00-5:30 PM	15
14	HONG KONG	WJBF	A-N	SAT	8:00-8:30 AM	15
14	MOBILE 1	WJBF	A-N	MON	8:00-9:00 PM	15
14	TONY ORLANDO & DAWN	WRDW	C	WED	8:00-9:00 PM	15
14	TROOPER TERRY	WJBF	A-N	MON-FRI*	4:30-5:00 PM	15
19	CANDID CAMERA	WJBF	A-N	WED	7:30-8:00 PM	14
19	GOMER PYLE USMC	WRDW	C	THU**	4:30-5:00 PM	14
19	THE ROOKIES	WJBF	A-N	TUE	9:00-10:00 PM	14
19	3 FOR THE ROAD	WRDW	C	SUN	7:00-8:00 PM	14
19	TOM & JERRY & APE	WJBF	A-N	SAT	8:00-8:30 AM	14

*STATION TOTALS BASED ON A FIVE DAY AVERAGE

**STATION TOTALS BASED ON ONLY ONE DAY RATHER THAN M-F AVERAGE

NOVEMBER 1975
MARKET: DENVER

RANK	PROGRAM	STATION	AFFILIATION	DAY	TIME	STATION TOTALS (000)
						CHILDREN 6-11
1	LITTLE HOUSE ON THE PRAIRIE	KOA	N	WED	7:00-8:00 PM	67
2	6 MILLION \$ MAN	KBTv	A	SUN	7:00-8:00 PM	57
3	SWISS FAMILY ROBINSON	KBTv	A	SUN	6:00-7:00 PM	50
4	FAT ALBERT	KMGH	C	SAT	10:30-11:00 AM	44
5	SPEED BUGGY	KBTv	A	SAT	9:00-9:30 AM	41
5	THAT GIRL	KWGN	IND	THU**	5:30-6:00 PM	41
7	GHOST BUSTERS	KMGH	C	SAT	9:30-10:00 AM	40
8	HAPPY DAYS	KBTv	A	TUE	7:00-7:30 PM	39
8	LAND OF THE LOST	KOA	N	SAT	8:00-8:30 AM	39
8	WORLD OF DISNEY	KOA	N	SUN	7:00-9:00 PM	39
11	SCOOBY DOO	KMGH	C	SAT	7:30-8:00 AM	38
12	SHAZAM & ISIS HOUR	KMGH	C	SAT	8:00-9:00 AM	37
13	I DREAM OF JEANNIE	KWGN	IND	MON-SAT+	5:00-5:30 PM	36
14	THE JEFFERSONS	KMGH	C	SAT	7:00-7:30 PM	34
14	VALLEY OF THE DINOSAURS	KMGH	C	SAT	10:00-10:30 AM	34
16	ADAM 12	KWGN	IND	THU**	6:30-7:00 PM	33
16	ADVENTURES OF GILLIGAN	KBTv	A	SAT	8:00-8:30 AM	33
16	CHANNEL 7 CARTOONS	KMGH	C	MON-FRI*	8:00-8:30 AM	33
16	THE WALTONS	KMGH	C	THU	7:00-8:00 PM	33
20	ANDY GRIFFITH	KWGN	IND	MON-FRI*	6:00-6:30 PM	32
20	GOOD TIMES	KMGH	C	TUE	7:00-7:30 PM	32
20	RUN JOE RUN	KOA	N	SAT	8:30-9:00 AM	32
20	SPACE NUTS	KMGH	C	SAT	9:00-9:30 AM	32

*STATION TOTALS BASED ON A FIVE DAY AVERAGE

**STATION TOTALS BASED ON ONLY ONE DAY RATHER THAN M-F AVERAGE

+STATION TOTALS BASED ON A SIX DAY AVERAGE

MARKET: NOVEMBER 1975
EVANSVILLE

RANK	PROGRAM	STATION	AFFILIATION	DAY	TIME	STATION TOTALS (000)
						CHILDREN 6-11
1	6 MILLION \$ MAN	WTVW	A	SUN	7:00-8:00 PM	28
1	SWISS FAMILY ROBINSON	WTVW	A	SUN	5:00-6:00 PM	28
3	CARTOON CARNIVAL	WEHT	C	MON-FRI*	3:30-4:00 PM	25
4	THE WALTONS	WEHT	C	THU	7:00-8:00 PM	24
5	BEWITCHED	WEHT	C	MON-THU++	4:00-4:30 PM	23
5	BRADY BUNCH	WEHT	C	MON-FRI*	4:30-5:00 PM	23
5	HAPPY DAYS	WTVW	A	SAT	6:30-7:00 PM	23
8	SCOOBY DOO	WEHT	C	SAT	8:30-9:00 AM	22
8	SHAZAM & ISIS HOUR	WEHT	C	SAT	9:00-10:00 AM	22
10	BUGS BUNNY & ROAD RUNNER	WEHT	C	SAT	7:30-8:30 AM	21
10	TREASURE HUNT	WEHT	C	WED	6:30-7:00 PM	21
10	WHEN THINGS WERE ROTTEN	WTVW	A	WED	7:00-7:30 PM	21
13	ANDY GRIFFITH	WEHT	C	MON-FRI*	5:00-5:30 PM	20
13	GOOD TIMES	WEHT	C	TUE	7:00-7:30 PM	20
15	BARETTA	WTVW	A	WED	8:00-9:00 PM	19
16	ALL IN THE FAMILY	WEHT	C	MON	8:00-8:30 PM	17
16	THAT'S MY MAMA	WTVW	A	WED	7:30-8:00 PM	17
16	TONY ORLANDO & DAWN	WEHT	C	WED	7:00-8:00 PM	17
16	WILD WORLD OF ANIMALS	WEHT	C	THU	6:30-7:00 PM	17
16	WORLD OF DISNEY	WFIE	N	SUN	6:15-8:00 PM	17

*STATION TOTALS BASED ON A FIVE DAY AVERAGE
++STATION TOTALS BASED ON A FOUR DAY AVERAGE

NOVEMBER 1975
MARKET: GREENSBORO-HIGH POINT-WINSTON SALEM

C - 7

<u>RANK</u>	<u>PROGRAM</u>	<u>STATION</u>	<u>AFFILIATION</u>	<u>DAY</u>	<u>TIME</u>	<u>STATION TOTALS (000)</u> <u>CHILDREN 6-11</u>
1	6 MILLION \$ MAN	WGHP	A	SUN	8:00-9:00 PM	55
2	THE WALTONS	WFMY	C	THU	8:00-9:00 PM	44
3	TARZAN	WGHP	A	SUN	6:00-7:00 PM	42
4	SHAZAM & ISIS HOUR	WFMY	C	SAT	10:00-11:00 AM	39
4	SWISS FAMILY ROBINSON	WGHP	A	SUN	7:00-8:00 PM	39
6	RHODA	WFMY	C	MON	8:00-8:30 PM	37
7	BUGS BUNNY & ROAD RUNNER	WFMY	C	SAT	8:30-9:30 AM	36
7	SCOOBY DOO	WFMY	C	SAT	9:30-10:00 AM	36
9	GHOST BUSTERS	WFMY	C	SAT	11:30-12:00 NN	35
10	GOOD TIMES	WFMY	C	TUE	8:00-8:30 PM	33
10	M*A*S*H	WFMY	C	FRI	8:30-9:00 PM	33
10	SANFORD & SON	WXII	N	FRI	8:00-8:30 PM	33
13	WORLD OF DISNEY	WXII	N	SUN	7:30-9:00 PM	32
14	VALLEY OF THE DINOSAURS	WFMY	C	SAT	12:00-12:30 PM	31
15	FAT ALBERT	WFMY	C	SAT	12:00-1:00 PM	30
15	GILLIGAN'S ISLE	WXII	N	MON-FRI*	4:00-4:30 PM	30
17	CANDID CAMERA	WXII	N	SUN	7:00-7:30 PM	29
17	SPACE NUTS	WFMY	C	SAT	11:00-11:30 AM	29
19	ADAM 12	WXII	N	THU**	4:30-5:00 PM	27
19	HAPPY DAYS	WGHP	A	TUE	8:00-8:30 PM	27
19	THE JEFFERSONS	WFMY	C	SAT	8:00-8:30 PM	27

*STATION TOTALS BASED ON A FIVE DAY AVERAGE

**STATION TOTALS BASED ON ONLY ONE DAY RATHER THAN M-F AVERAGE

NOVEMBER 1975
MARKET: NASHVILLE, TN

C - 8

RANK	PROGRAM	STATION	AFFILIATION	DAY	TIME	STATION TOTALS (000)
						CHILDREN 6-11
1	THE WALTONS	WTVF	C	THU	7:00-8:00 PM	80
2	3 STOOGES	WNGE	A	SUN	8:30-9:30 AM	59
3	HEE HAW	WTVF	C	SAT	6:00-7:00 PM	55
4	LEAVE IT TO BEAVER	WSM	N	MON-FRI*	4:00-4:30 PM	54
5	SHAZAM & ISIS HOUR	WTVF	C	SAT	9:00-10:00 AM	53
6	LITTLE HOUSE ON THE PRAIRIE	WSM	N	WED	7:00-8:00 PM	51
6	SCOOPY DOO	WTVF	C	SAT	8:30-9:00 AM	51
8	GOOD TIMES	WTVF	C	TUE	7:00-7:30 PM	50
9	6 MILLION \$ MAN	WNGE	A	SUN	7:00-8:00 PM	48
9	THE LUCY SHOW	WSM	N	MON-FRI*	4:30-5:00 PM	48
11	BUGS BUNNY & ROAD RUNNER	WTVF	C	SAT	7:30-8:30 AM	47
11	SWISS FAMILY ROBINSON	WNGE	A	SUN	6:00-7:00 PM	47
13	THE JEFFERSONS	WTVF	C	SAT	7:00-7:30 PM	44
13	PHYLLIS	WTVF	C	MON	7:30-8:00 PM	44
15	FAMILY AFFAIR	WSM	N	MON-FRI*	5:00-5:30 PM	42
15	RHODA	WTVF	C	MON	7:00-7:30 PM	42
17	SANFORD & SON	WSM	N	FRI	7:00-7:30 PM	38
17	WORLD OF DISNEY	WSM	N	SUN	6:00-8:00 PM	38
19	EMERGENCY	WSM	N	SAT	7:00-8:00 PM	37
19	GHOST BUSTERS	WTVF	C	SAT	10:30-11:00 AM	37
19	WILD KINGDOM	WNGE	A	SUN	5:30-6:00 PM	37

*STATION TOTALS BASED ON A FIVE DAY AVERAGE

NOVEMBER 1975
MARKET: NEW YORK

C - 9

<u>RANK</u>	<u>PROGRAM</u>	<u>STATION</u>	<u>AFFILIATION</u>	<u>DAY</u>	<u>TIME</u>	<u>STATION TOTALS (000)</u> <u>CHILDREN 6-11</u>
1	HAPPY DAYS	WABC	A	TUE	8:00-8:30 PM	761
2	WELCOME BACK, KOTTER	WABC	A	TUE	8:30-9:00 PM	725
3	FLINTSTONES	WNEW	IND	MON-FRI*	5:30-6:00 PM	607
4	6 MILLION \$ MAN	WABC	A	SUN	8:00-9:00 PM	599
5	BRADY BUNCH	WNEW	IND	MON-FRI*	5:00-5:30 PM	586
6	BEWITCHED	WNEW	IND	MON-FRI*	6:00-6:30 PM	562
7	THE PARTRIDGE FAMILY	WNEW	IND	MON-FRI*	6:30-7:00 PM	541
8	ANDY GRIFFITH	WNEW	IND	MON-FRI*	7:00-7:30 PM	445
9	WHEN THINGS WERE ROTTEN	WABC	A	WED	8:00-8:30 PM	440
10	INVISIBLE MAN	WNBC	N	MON	8:30-9:00 PM	425
11	LOST SAUCER	WABC	A	SAT	9:30-10:00 AM	404
12	WONDERAMA	WNEW	IND	SUN	8:00-11:00 AM	402
13	SANFORD & SON	WNBC	N	FRI	8:00-8:30 PM	390
14	MARY TYLER MOORE	WCBS	C	SAT	9:00-9:30 PM	386
15	RHODA	WCBS	C	MON	8:00-8:30 PM	384
16	FLINTSTONES	WNEW	IND	SUN	11:00-11:30 AM	379
17	LAND OF THE LOST	WNBC	N	SAT	10:00-10:30 AM	374
18	THE JEFFERSONS	WCBS	C	SAT	8:00-8:30 PM	372
19	MONKEES	WNEW	IND	MON-FRI*	4:30-5:00 PM	364
20	ADAM 12	WNEW	IND	MON-FRI*	7:30-8:00 PM	359

*STATION TOTALS BASED ON A FIVE DAY AVERAGE

NOVEMBER 1975
MARKET: SALT LAKE CITY

<u>RANK</u>	<u>PROGRAM</u>	<u>STATION</u>	<u>AFFILIATION</u>	<u>DAY</u>	<u>TIME</u>	<u>STATION TOTALS (000)</u> <u>CHILDREN 6-11</u>
1	HAPPY DAYS	KTVX	A	TUE	7:00-7:30 PM	75
2	6 MILLION \$ MAN	KTVX	A	SUN	7:00-8:00 PM	65
3	DEVLIN	KTVX	A	SUN	8:30-9:00 AM	53
4	BRADY BUNCH	KTVX	A	MON-FRI*	4:30-5:00 PM	51
5	SWISS FAMILY ROBINSON	KTVX	A	SUN	6:00-7:00 PM	50
6	THESE ARE THE DAYS	KTVX	A	SUN	9:00-9:30 AM	46
7	BULLWINKLE	KTVX	A	SUN	8:00-8:30 AM	45
7	GILLIGAN'S ISLE	KTVX	A	MON-FRI*	4:00-4:30 PM	45
9	ADVENTURES OF GILLIGAN	KTVX	A	SAT	8:00-8:30 AM	40
9	HOTEL BALDERDASH	KTVX	A	MON-FRI*	7:00-8:30 AM	40
9	WHEN THINGS WERE ROTTEN	KTVX	A	WED	7:00-7:30 PM	40
12	LITTLE HOUSE ON THE PRAIRIE	KUTV	N	WED	7:00-8:00 PM	38
12	THAT'S MY MAMA	KTVX	A	WED	7:30-8:00 PM	38
12	THE WALTONS	KSL	C	THU	7:00-8:00 PM	38
15	ANDY GRIFFITH	KTVX	A	MON-FRI*	5:30-6:00 PM	37
15	WORLD OF DISNEY	KUTV	N	SUN	6:00-8:00 PM	37
17	ABC FRIDAY NIGHT MOVIE	KTVX	A	FRI	8:00-10:00 PM	36
17	CONCENTRATION	KTVX	A	THU**	6:30-7:00 PM	36
17	EMERGENCY	KUTV	N	SAT	7:00-8:00 PM	36
20	NBC SAT NIGHT AT THE MOVIES	KUTV	N	SAT	8:00-10:00 PM	33
20	RHODA	KSL	C	MON	7:00-7:30 PM	33
20	SPEED BUGGY	KTVX	A	SAT	9:00-9:30 AM	33

*STATION TOTALS BASED ON A FIVE DAY AVERAGE

**STATION TOTALS BASED ON ONLY ONE DAY RATHER THAN M-F AVERAGE

NOVEMBER 1975
MARKET: SAN DIEGO

C - 11

<u>RANK</u>	<u>PROGRAM</u>	<u>STATION</u>	<u>AFFILIATION</u>	<u>DAY</u>	<u>TIME</u>	<u>STATION TOTALS (000)</u> <u>CHILDREN 6-11</u>
1	SCOOBY DOO	KFMB	C	SAT	9:30-10:00 AM	50
2	HAPPY DAYS	KCST	A	TUE	8:00-8:30 PM	47
3	6 MILLION \$ MAN	KCST	A	SUN	8:00-9:00 PM	46
4	LITTLE HOUSE ON THE PRAIRIE	KGTV	N	WED	8:00-9:00 PM	42
4	THE WALTONS	KFMB	C	THU	8:00-9:00 PM	42
6	PINK PANTHER	KGTV	N	SAT	8:30-9:00 AM	39
7	SANFORD & SON	KGTV	N	FRI	8:00-8:30 PM	38
8	WELCOME BACK, KOTTER	KCST	A	TUE	8:30-9:00 PM	37
9	LAND OF THE LOST	KGTV	N	SAT	9:00-9:30 AM	36
9	SPACE 1999	KGTV	N	SAT	7:00-8:00 AM	36
9	WORLD OF DISNEY	KGTV	N	SUN	7:00-9:00 PM	36
12	CHICO & THE MAN	KGTV	N	FRI	8:30-9:00 PM	34
12	POPEYE	XETV	IND	MON-FRI*	3:00-4:00 PM	34
14	M*A*S*H	KFMB	C	FRI	8:30-9:00 PM	33
15	TOM & JERRY & APE	KCST	A	SAT	7:30-8:00 AM	32
16	LOST SAUCER	KCST	A	SAT	8:30-9:00 AM	30
16	WALDO KITTY	KGTV	N	SAT	8:00-8:30 AM	30
18	SWISS FAMILY ROBINSON	KCST	A	SUN	7:00-8:00 PM	28
19	GILLIGAN'S ISLE	XETV	IND	MON**	4:30-5:00 PM	27
19	RHODA	KFMB	C	MON	8:00-8:30 PM	27

*STATION TOTALS BASED ON A FIVE DAY AVERAGE

**STATION TOTALS BASED ON ONLY ONE DAY RATHER THAN M-F AVERAGE

NOVEMBER 1975
MARKET: SPOKANE

C - 12

<u>RANK</u>	<u>PROGRAM</u>	<u>STATION</u>	<u>AFFILIATION</u>	<u>DAY</u>	<u>TIME</u>	<u>STATION TOTALS (000)</u> <u>CHILDREN 6-11</u>
1	SCOOBY DOO	KXLY	C	SAT	9:30-10:00 AM	33
2	HAPPY DAYS	KREM	A	TUE	8:00-8:30 PM	32
3	SUPERMAN	KREM	A	MON-FRI*	5:00-5:30 PM	30
4	SHAZAM & ISIS HOUR	KXLY	C	SAT	10:00-11:00 AM	28
5	MICKEY MOUSE CLUB	KREM	A	MON-FRI*	4:30-5:00 PM	27
6	BRADY BUNCH	KREM	A	TUE-FRI++	6:30-7:00 PM	26
6	GHOST BUSTERS	KXLY	C	SAT	11:30-12:00 NN	26
6	GOOD TIMES	KXLY	C	MON	7:30-8:00 PM	26
6	VALLEY OF THE DINOSAURS	KXLY	C	SAT	12:00-12:30 PM	26
10	WORLD OF DISNEY	KHQ	N	SUN	7:00-9:00 PM	25
11	ADAM 12	KREM	A	TUE-FRI++	7:00-7:30 PM	24
11	BUGS BUNNY & ROAD RUNNER	KXLY	C	SAT	8:30-9:30 AM	24
11	LITTLE HOUSE ON THE PRAIRIE	KHQ	N	WED	8:00-9:00 PM	24
11	TOM & JERRY & APE	KREM	A	SAT	7:30-8:30 AM	24
15	HARVEY CARTOONS	KXLY	C	SAT	11:00-11:30 AM	23
15	MISSION MAGIC	KREM	A	SUN	9:00-9:30 AM	23
17	LITTLE RASCALS	KREM	A	SUN	10:00-10:30 AM	22
17	6 MILLION \$ MAN	KREM	A	SUN	8:00-9:00 PM	22
17	SPEED BUGGY	KREM	A	SAT	4:30-5:00 PM	22
20	FAMILY AFFAIR	KREM	A	MON-FRI*	4:00-4:30 PM	21

*STATION TOTALS BASED ON A FIVE DAY AVERAGE
++STATION TOTALS BASED ON A FOUR DAY AVERAGE

MARKET: NOVEMBER 1975
TYLER, TEXAS

<u>RATE</u>	<u>PROGRAM</u>	<u>STATION</u>	<u>AFFILIATION</u>	<u>DAY</u>	<u>TIME</u>	<u>STATION TOTALS (000)</u> <u>CHILDREN 6-11</u>
1	THAT'S MY MAMA	KLTIV+	A-N	WED	7:30-8:00 PM	20
2	MARCUS WEIBY	KLTIV+	A-N	TUE	9:00-10:00 PM	19
3	SWISS FAMILY ROBINSON	KLTIV+	A-N	SUN	6:30-7:00 PM	18
4	WHEN THINGS WERE ROTTEN	KLTIV+	A-N	WED	7:00-7:30 PM	17
5	ADVENTURES OF GILLIGAN	KLTIV+	A-N	SAT	9:00-9:30 AM	16
5	STREETS OF SAN FRANCISCO	KLTIV+	A-N	THU	8:00-9:00 PM	16
7	HAPPY DAYS	KLTIV+	A-N	TUE	7:00-7:30 PM	15
7	ON THE ROCKS	KLTIV+	A-N	THU	7:30-8:00 PM	15
9	SATURDAY EARLY NEWS	KLTIV+	A-N	SAT	6:00-6:30 PM	13
10	BONANZA	KLTIV+	A-N	THU**	4:30-5:30 PM	12
10	MOBILE 1	KLTIV+	A-N	MON	7:30-8:00 PM	12
10	WELCOME BACK, KOTTER	KLTIV+	A-N	TUE	7:30-8:00 PM	12
10	WIDE WORLD OF SPORTS	KLTIV+	A-N	SAT	4:00-5:30 PM	12
14	BARETTA	KLTIV+	A-N	WED	8:00-9:00 PM	11
14	EVENING EDITION NEWS	KLTIV+	A-N	FRI	10:00-10:30 PM	11
14	HAPPY MECHANIC	KLTIV+	A-N	SAT	10:30-11:00 AM	11
14	S.W.A.T.	KLTIV+	A-N	SAT	8:00-9:00 PM	11
14	6 MILLION \$ MAN	KLTIV+	A-N	SUN	7:00-8:00 PM	11
19	HARRY O	KLTIV+	A-N	THU	9:00-10:00 PM	10
19	TRUTH OR CONSEQUENCES	KLTIV+	A-N	MON-FRI*	6:30-7:00 PM	10

NOTE: STATION TOTALS FOR KTLV- INCLUDE BOTH PARENT AND SATELLITE VIEWING

*STATION TOTALS BASED ON A FIVE DAY AVERAGE

**STATION TOTALS BASED ON ONLY ONE DAY RATHER THAN M-F AVERAGE

NOVEMBER 1975
MARKET: WASHINGTON, D. C.

RANK	PROGRAM	STATION	AFFILIATION	DAY	TIME	STATION TOTALS (000)
						CHILDREN 6-11
1	HAPPY DAYS	WMAL	A	MON	8:00-8:30 PM	174
2	BRADY BUNCH	WTTG	IND	MON-SAT+	6:00-6:30 PM	145
3	WELCOME BACK, KOTTER	WMAL	A	TUE	8:30-9:00 PM	142
4	FAMILY AFFAIR	WTTG	IND	MON-SAT+	6:30-7:00 PM	119
5	BUGS BUNNY	WDCA	IND	FRI**	4:30-5:00 PM	113
6	6 MILLION \$ MAN	WMAL	A	SUN	8:00-9:00 PM	110
7	WHEN THINGS WERE ROTTEN	WMAL	A	TUE	8:00-8:30 PM	109
8	SANFORD AND SON	WRC	N	FRI	8:00-8:30 PM	107
8	WONDERAMA	WTTG	IND	SUN	8:00-11:00 AM	107
10	THE WALTONS	WTOP	C	THU	8:00-9:00 PM	99
11	M*A*S*H	WTOP	C	FRI	8:30-9:00 PM	98
12	PINK PANTHER	WRC	N	SAT	9:30-10:00 AM	97
13	THE PARTRIDGE FAMILY	WTTG	IND	M-F*	5:30-6:00 PM	95
14	BATMAN	WDCA	IND	THU**	5:00-5:30 PM	92
15	ANDY GRIFFITH	WTTG	IND	MON-SAT+	7:00-7:30 PM	90
16	CHICO AND THE MAN	WRC	N	FRI	8:30-9:00 PM	89
16	THE MICKEY MOUSE CLUB	WTTG	IND	MON-FRI*	5:00-5:30 PM	89
18	MARY TYLER MOORE	WTOP	C	SAT	9:00-9:30 PM	88
18	THAT'S MY MAMA	WMAL	A	WED	8:30-9:00 PM	88
20	LOVE AMERICAN STYLE	WTTG	IND	MON**	7:30-8:00 PM	87

*STATION TOTALS BASED ON A FIVE DAY AVERAGE

**STATION TOTALS BASED ON ONLY ONE DAY RATHER THAN M-F AVERAGE

+STATION TOTALS BASED ON A SIX DAY AVERAGE

CBS MEMORANDUM

APPENDIX D-1

FROM: Jay Eliasberg (CEG)

TO: MR. SCHNEIDER

DATE: December 4, 1974

cc: D. Blank, A. Becker

You asked us for the evening viewing pattern of children and teenagers in the Eastern Time Zone and you asked us to compare these patterns to those in the Central Time Zone.

The peak usage half hour for children 2-11 years of age in the Eastern Time Zone is 7:30 p.m.-8:00 p.m. when 51.7% of all children 2-11 years of age are viewing. Viewing peaks (57.9%) at the same time in the Central Time Zone. There is a sharp drop off in children viewing in the 9:00 p.m.-9:30 p.m. half hour in the Eastern Time Zone (8:30 p.m.-9:00 p.m. 43.8%, 9:00 p.m.-9:30 p.m. 28.2%) and a similar drop off (41.6% to 29.6%) at that same local time in the Central Time Zone. During the 10:00 p.m.-11:00 p.m. hour, children's viewing is higher in the Eastern Time Zone than in the Central Time Zone (11.6% vs 7.7%), probably reflecting the fact that network programs end at 11:00 p.m. in the Eastern Time Zone and at 10:00 p.m. in the Central Time Zone. In both time zones 10:00 p.m.-11:00 p.m. viewing is far lower than at any earlier time.

As far as teenage viewing is concerned, the level is, in general, higher in the Central Time Zone than in the Eastern Time Zone. There is no sharp peak in either time zone, but as far as a peak can be described, it appears in the 8:30 p.m.-9:00 p.m. half hour in the Eastern Time Zone (37.3%) and the 8:00 p.m.-8:30 p.m. half hour in the Central Time Zone (46.4%). There is a sizable fall off in the 10:00 p.m.-10:30 p.m. half hour in the Eastern Time Zone (9:30 p.m.-10:00 p.m. 34.2%, 10:00 p.m.-10:30 p.m. 28.9%) and an even sharper fall off in that half hour in the Central Time Zone (9:30 p.m.-10:00 p.m. 40.4%, 10:00 p.m.-10:30 p.m. 22.5%).

Perhaps, it will be easier for you to see these patterns by examining the tables and charts attached. There is one table and one chart for each of the sub-groups of children:

2- 5 years of age
6-11 years of age
2-11 years of age
12-17 years of age
2-17 years of age

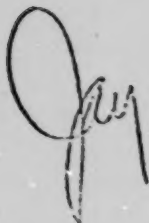
JOHN A. SCHNEIDER

DEC. 4 1974

AM 8,9,10,11,12,13,14,15,16

These charts and table have been arranged to reflect network feed patterns. Thus, to read the usage level in the Central Time Zone one must look one hour later. In other words, the 8:00 p.m. figure for the Central Time Zone is opposite the 9:00 p.m. figure for the Eastern Time Zone.

One final comment, because of changes in Nielsen's reporting system these data are not available for 1974. The best we could have done is to make crude estimates. We chose instead to use the best data that we had -- reflecting viewing in January-February 1970. It has been our experience that this type of data does not change from year to year. If it should be necessary, we can get similar data for 1974, but it will take a minimum of three weeks.



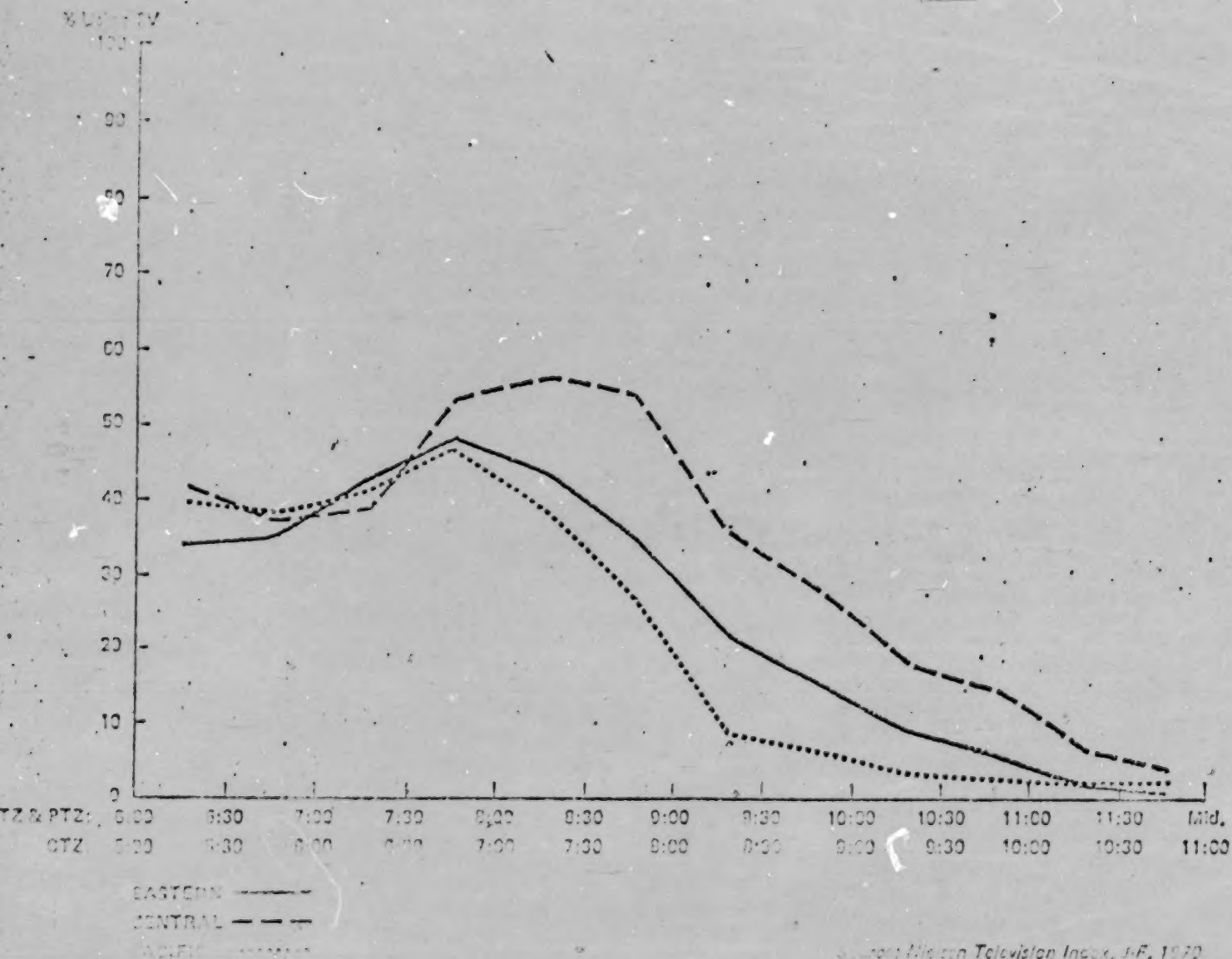
CHILDREN (2-5 YEARS) VIEWING TELEVISION
BY TIME ZONE

	<u>EASTERN</u> <u>%</u> <u>Viewing</u> <u>TV</u>	<u>CENTRAL*</u> <u>%</u> <u>Viewing</u> <u>TV</u>	<u>PACIFIC</u> <u>%</u> <u>Viewing</u> <u>TV</u>
<u>MONDAY-SUNDAY</u>			
6:00 p.m.-6:30 p.m.	34.4	41.9	40.0
6:30 p.m.-7:00 p.m.	35.0	37.4	38.7
7:00 p.m.-7:30 p.m.	41.9	39.6	41.3
7:30 p.m.-8:00 p.m.	49.1	53.4	47.2
8:00 p.m.-8:30 p.m.	43.7	56.8	39.6
8:30 p.m.-9:00 p.m.	35.7	54.3	27.7
9:00 p.m.-9:30 p.m.	21.3	37.9	9.8
9:30 p.m.-10:00 p.m.	16.7	29.1	6.4
10:00 p.m.-10:30 p.m.	9.5	18.1	3.8
10:30 p.m.-11:00 p.m.	6.4	14.3	3.4
11:00 p.m.-11:30 p.m.	2.7	6.4	2.1
11:30 p.m.-12:00 Mid.	1.2	3.0	2.1

*5:00 p.m.-11:00 p.m.

Source: Nielsen Television Index, January-February 1970

CHILDREN 3 YEARS VIEWING TELEVISION BY TIME ZONE



Source: Nielsen Television Index, J-F, 1970

CHILDREN (6-11 YEARS) VIEWING TELEVISION
BY TIME ZONE

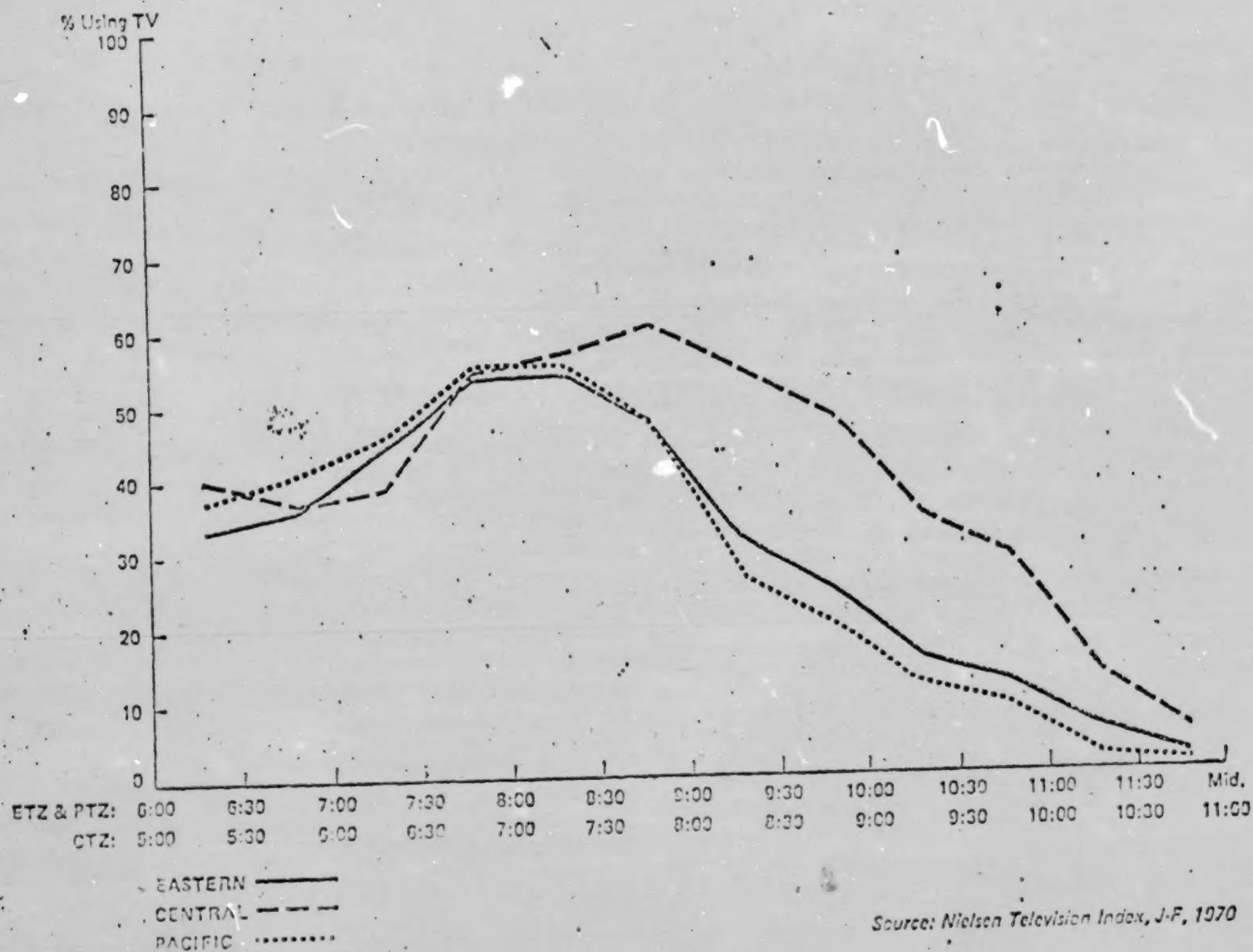
D - 5

	<u>EASTERN</u> <u>%</u> <u>Viewing</u> <u>TV</u>	<u>CENTRAL*</u> <u>%</u> <u>Viewing</u> <u>TV</u>	<u>PACIFIC</u> <u>%</u> <u>Viewing</u> <u>TV</u>
<u>MONDAY-SUNDAY</u>			
6:00 p.m.-6:30 p.m.	33.2	40.0	38.0
6:30 p.m.-7:00 p.m.	35.9	36.7	40.1
7:00 p.m.-7:30 p.m.	44.2	39.2	45.5
7:30 p.m.-8:00 p.m.	53.3	55.0	55.6
8:00 p.m.-8:30 p.m.	53.2	58.8	55.6
8:30 p.m.-9:00 p.m.	48.8	60.2	48.7
9:00 p.m.-9:30 p.m.	32.5	54.5	27.0
9:30 p.m.-10:00 p.m.	26.0	49.4	20.1
10:00 p.m.-10:30 p.m.	15.4	36.8	12.3
10:30 p.m.-11:00 p.m.	12.2	30.0	9.4
11:00 p.m.-11:30 p.m.	4.9	13.0	3.2
11:30 p.m.-12:00 Mid.	2.2	6.4	1.9

* 5:00 p.m.-11:00 p.m.

Source: Nielsen Television Index, January-February 1970

CHILDREN (6-11 YEARS) VIEWING TELEVISION BY TIME ZONE



Source: Nielsen Television Index, J-F, 1970

CHILDREN (2-11 YEARS) VIEWING TELEVISION
BY TIME ZONE

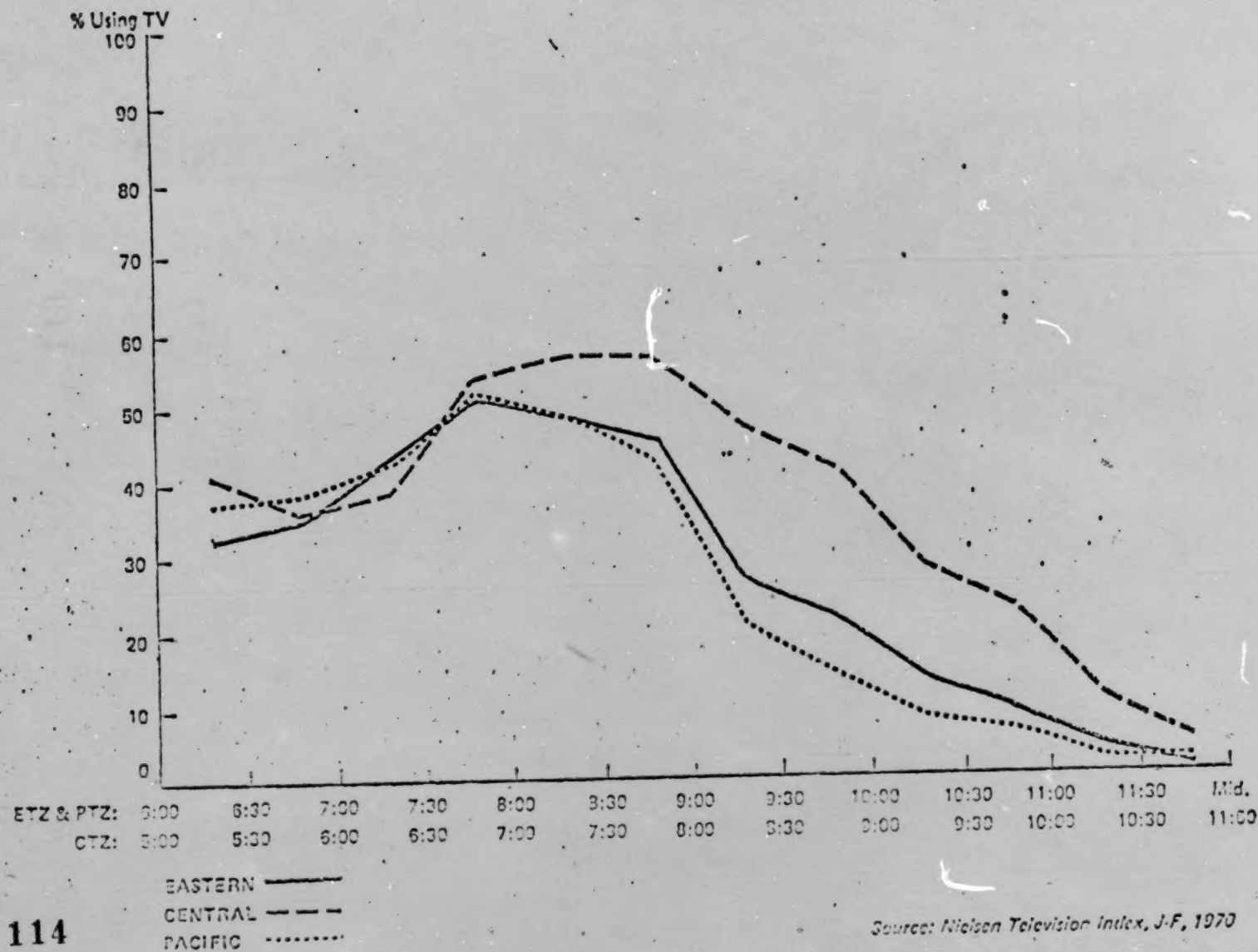
D - 7

	<u>EASTERN</u> <u>%</u> Viewing TV	<u>CENTRAL*</u> <u>%</u> Viewing TV	<u>PACIFIC</u> <u>%</u> Viewing TV
<u>MONDAY-SUNDAY</u>			
6:00 p.m.-6:30 p.m.	33.7	40.8	38.8
6:30 p.m.-7:00 p.m.	35.6	37.0	39.6
7:00 p.m.-7:30 p.m.	43.3	39.4	43.8
7:30 p.m.-8:00 p.m.	51.7	54.4	52.4
8:00 p.m.-8:30 p.m.	49.5	58.0	49.4
8:30 p.m.-9:00 p.m.	43.8	57.9	40.6
9:00 p.m.-9:30 p.m.	28.2	48.1	20.4
9:30 p.m.-10:00 p.m.	22.4	41.6	14.8
10:00 p.m.-10:30 p.m.	13.1	29.6	9.0
10:30 p.m.-11:00 p.m.	10.0	23.9	7.1
11:00 p.m.-11:30 p.m.	4.1	10.4	2.8
11:30 p.m.-12:00 Mid.	1.8	5.0	2.0

*5:00 p.m.-11:00 p.m.

Source: Nielsen Television Index, January-February 1970

CHILDREN (2-11 YEARS) VIEWING TELEVISION BY TIME ZONE



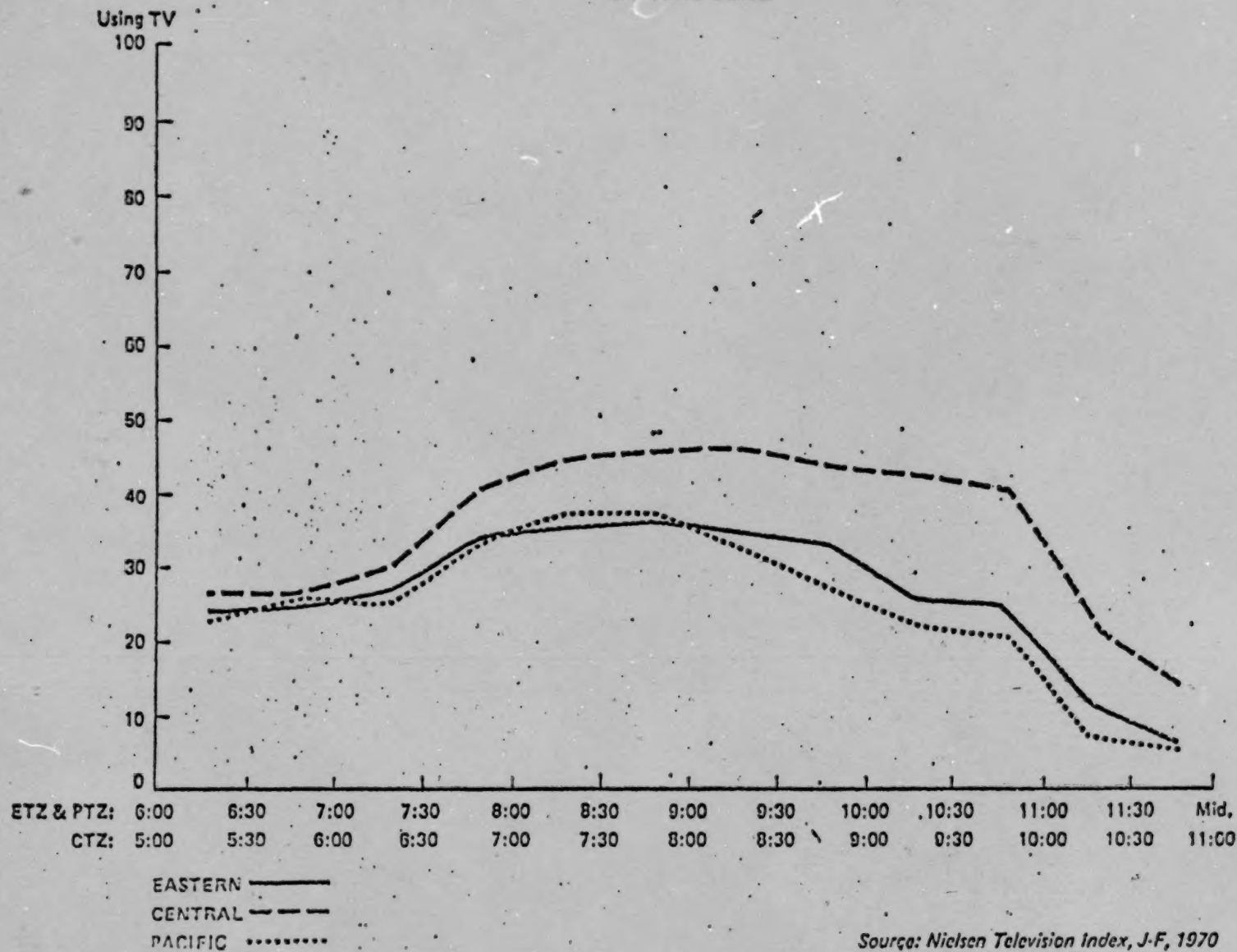
CHILDREN (12-17 YEARS) VIEWING TELEVISION
BY TIME ZONE

D - 9

	<u>EASTERN</u> <u>%</u> <u>Viewing</u> <u>TV</u>	<u>CENTRAL</u> ³ <u>%</u> <u>Viewing</u> <u>TV</u>	<u>PACIFIC</u> <u>%</u> <u>Viewing</u> <u>TV</u>
<u>MONDAY-SUNDAY</u>			
6:00 p.m.-6:30 p.m.	24.6	27.0	23.7
6:30 p.m.-7:00 p.m.	24.7	27.1	25.8
7:00 p.m.-7:30 p.m.	28.5	30.4	26.7
7:30 p.m.-8:00 p.m.	34.5	41.8	34.7
8:00 p.m.-8:30 p.m.	36.8	45.8	38.0
8:30 p.m.-9:00 p.m.	37.3	45.9	37.7
9:00 p.m.-9:30 p.m.	35.0	46.4	30.3
9:30 p.m.-10:00 p.m.	34.2	44.9	28.8
10:00 p.m.-10:30 p.m.	28.9	43.0	22.8
10:30 p.m.-11:00 p.m.	26.3	40.4	20.5
11:00 p.m.-11:30 p.m.	12.9	22.5	8.6
11:30 p.m.-12:00 Mid.	7.6	15.6	5.0
*5:00 p.m.-11:00 p.m.			

Source: Nielsen Television Index, January-February 1970

CHILDREN (12-17 YEARS) VIEWING TELEVISION BY TIME ZONE



Source: Nielsen Television Index, J-F, 1970

CHILDREN (2-17 YEARS) VIEWING TELEVISION
BY TIME ZONE

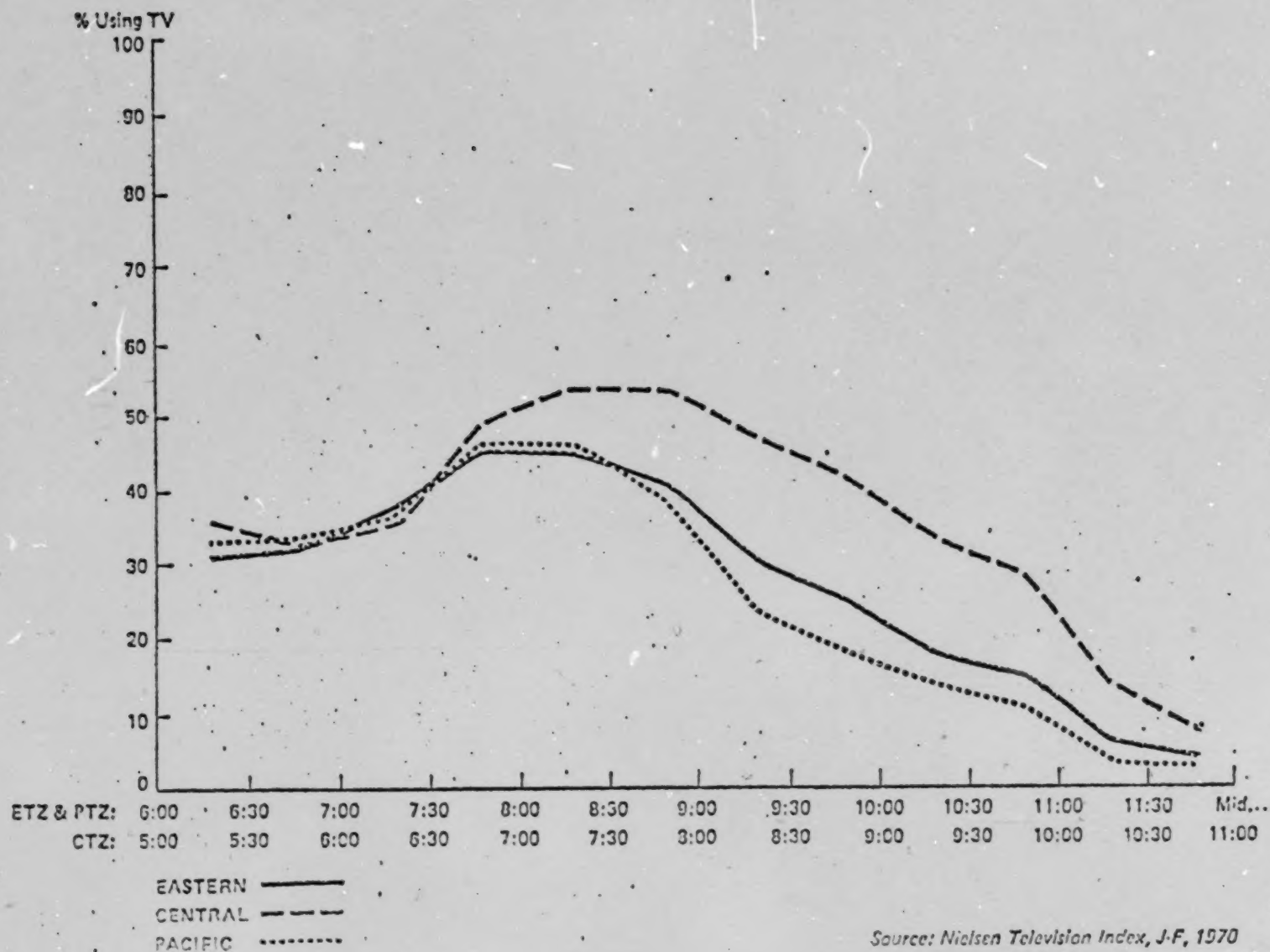
D - 11

	<u>EASTERN</u> <u>%</u> Viewing TV	<u>CENTRAL*</u> <u>%</u> Viewing TV	<u>PACIFIC</u> <u>%</u> Viewing TV
<u>MONDAY-SUNDAY</u>			
6:00 p.m.-6:30 p.m.	30.4	35.8	33.4
6:30 p.m.-7:00 p.m.	31.7	33.5	34.7
7:00 p.m.-7:30 p.m.	38.0	36.2	37.7
7:30 p.m.-8:00 p.m.	45.5	49.9	46.1
8:00 p.m.-8:30 p.m.	45.0	53.6	45.3
8:30 p.m.-9:00 p.m.	41.5	53.6	39.5
9:00 p.m.-9:30 p.m.	30.6	47.5	23.9
9:30 p.m.-10:00 p.m.	26.6	42.8	19.8
10:00 p.m.-10:30 p.m.	18.7	34.4	14.0
10:30 p.m.-11:00 p.m.	15.8	29.8	11.8
11:00 p.m.-11:30 p.m.	7.2	14.7	4.9
11:30 p.m.-12:00 Mid.	3.9	8.8	3.1

* 5:00 p.m.-11:00 p.m.

Source: Nielsen Television Index, January-February 1970

CHILDREN (2-17 YEARS) VIEWING TELEVISION BY TIME ZONE



Source: Nielsen Television Index, J-F, 1970

SUCROSE (REFINED SUGAR) CONTENT
OF COMMERCIALLY AVAILABLE BREAKFAST CEREALS**

Commercial Cereal Product	Sucrose Content (%)	Commercial Cereal Product	Sucrose Content (%)
Shredded Wheat (large biscuit)	1.0	Granola	16.6
Shredded Wheat (spoon size biscuit)	1.3	100% Bran	18.4
Cheerios	2.2 *	All Bran	20.0
Puffed Rice	2.4	Granola (with almonds and filberts)	21.4
Uncle Sam Cereal	2.4	Fortified Oat Flakes	22.2
Wheat Chex	2.6	Heartland	23.1
Grape Nut Flakes	3.3	Super Sugar Chex	24.5
Puffed Wheat	3.5	Sugar Frosted Flakes	29.0*
Alpen	3.8	Bran Buds	30.2
Post Toasties	4.1	Sugar Sparkled Corn Flakes	32.2
Product 19	4.1	Frosted Mini Wheats	33.6
Corn Total	4.4	Sugar Pops	37.8*
Special K	4.4	Alpha Bits	40.3*
Wheaties	4.7	Sir Grapefellow	40.7
Corn Flakes (Kroger)	5.1	Super Sugar Crisp	40.7*
Peanut Butter	5.2	Cocoa Puffs	43.0*
Grape Nuts	6.6	Captain Crunch	43.3*
Corn Flakes (Food Club)	7.0	Captain Crunch Crunchberry	43.4*
Crispy Rice	7.3	Kaboom	43.8
Corn Chex	7.5	Frankenberry	44.0
Corn Flakes (Kellogg)	8.1	Frosted Flakes	44.0
Total	8.1	Count Chocula	44.2
Rice Chex	8.5	Orange Quangaroos	44.7
Crisp Rice	8.8	Quisp	44.9
Raisin Bran (Skinner)	9.6	Boo Berry	45.7
Concentrate	9.9	Vanilly Crunch	45.8
Rice Krispies (Kellogg)	10.0*	Baron Von Redberry	45.8
Raisin Bran (Kellogg)	10.6*	Cocoa Krispies	45.9*
Heartland (with raisins)	13.5	Trix	46.6*
Buck Wheat	13.6	Fruit Loops	47.4*
Life	14.5	Honeycomb	48.8*
Granola (with dates)	14.5	Pink Panther	49.2
Granola (with raisins)	14.5	Cinnamon Crunch	50.3
Sugar Frosted Corn Flakes	15.6	Lucky Charms	50.4*
40% Bran Flakes (Post)	15.8	Cocoa Pebbles	53.5
Team	15.9	Apple Jacks	55.0*
Brown Sugar-Cinnamon Frosted		Fruit Pebbles	55.1*
Mini Wheats	16.0	King Vitamin	58.5
40% Bran Flakes (Kellogg)	16.2	Sugar Smacks	61.3
		Super Orange Crisp	68.0

* Cereal products in top 20 network advertised-to-children list, Broadcast Advertisers Report (BAR) first nine months, 1975.

** Information taken from September-October, 1974 Journal of Dentistry for Children

APPENDIX F

CEREAL ADVERTISING TO CHILDREN*

	Total # Comcls.		TV Ad. Cost In Millions
	Weekend	Total #	
	<u>Daytime</u> out of	<u>Comcls.</u>	<u>TOTAL</u>
Post Super Sugar Crisp	441	460	\$1.79
Freakies	434	440	1.83
Post Pebbles	279	334	1.15
Post Honeycomb	279	288	1.05
Kellogg Rice Krispies	227	686	3.31
Kellogg Sugar Frosted Flakes	211	526	2.36
Kellogg Cocoa Krispies	187	201	.85
General Mills Cheerios	184	408	2.15
Post Alpha Bits	180	198	.75
General Mills Lucky Charms	141	143	.47
Captain Crunch	138	138	.56
General Mills Trix	121	122	.37
Kellogg Raisin Bran	101	156	2.07
Captain Crunch Peanut Butter	101	101	.41
Kellogg Fruit Loops	79	200	.47
Captain Crunch Punch Crunch	72	72	.59
Kellogg Sugar Pops	69	164	.42
Captain Crunch Crunchberry	68	68	.30
Kellogg Apple Jacks	67	205	.43
Cocoa Puffs	52	52	.14
Raisin Bran	37	259	2.43
Life	1	130	1.37
Total	0	219	2.29
Fortified Oat Flakes	0	47	.70
Kellogg Product 19	0	278	1.43
Kellogg Special K	0	260	2.61

* Figures taken from Broadcast Advertisers Report (BAR) 1st nine months, 1975.

This series of paragraphs contains the substance of a letter to Robert Choate from Abraham E. Nizel, D.M.D., Professor of Nutrition and Preventive Dentistry, Tufts University School of Dental Medicine. Date is October 1976. Letter is in transit.

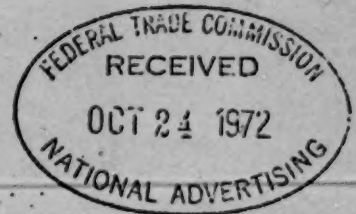
This is a statement by Abraham E. Nizel, D.M.D., Professor of nutrition and preventive dentistry at Tufts University, School of Dental Medicine, Boston, Massachusetts:

"Part of the energy/calorie issue being raised by the FTC is the sugar rich foods advertised on television to children. This type of detrimental nutritional information can be the cause of initiating the most prevalent degenerative disease in the United States today--dental caries. It affects 98% of our children. It was reported by Dr. A. L. Russell, an epidemiologist for a U. S. government Agency, at the International Conference on Sugars and Nutrition at Vanderbilt University in November, 1972, that the increased consumption of sugar was consistently related to increased incidents of dental decay. His survey showed that in natives of the Far East where sugar intake per person per year ranged from 12-32 pounds, the national average for decayed, missing or filled teeth were between 0.9 and 5.0. By contrast, in South American nations where sugar intake was between 44 and 88 pounds per person annually, the averages for decayed, missing or filled teeth in comparable age groups ran from 8.4 to 12.6.

"We also know that the frequent between meal snack eating of even small amounts of sugar sweetened foods prepared by food manufacturers is a dental health hazard. They can contribute to both excessive dental plaque formation and excessive dental decay.

"The heavy advocacy of food products rich in sugar and having an over-sweet taste when not accompanied by warnings of nutritional and dental hazards is not being honest and forthright to the consumer."

A BRIEF DESCRIPTION OF CHILDREN
AT VARIOUS STAGES OF
COGNITIVE DEVELOPMENT.



NOTE: This report was prepared by OCD staff and consultants. It is consistent with broad information on human development but does not represent an official OCD statement.

September 1972

This is a brief description of the different cognitive processes which play an important part in the repertoire of the competent adult, as well as the stages of development of these processes. The influence of television on cognitive development, in so far as we know or can estimate it, is also presented.

Although various theorists have their own explanations for the changes of childhood, all would subscribe to a description of human development as one in which age brings rising levels of comprehension, perception and judgment. 1

We will describe the commonly agreed upon universals of childhood, those waystops in cognitive development through which all children must pass on their road to adulthood in our society.

This is being done with the full understanding that individual children of the same age vary greatly in the stage of development reached and that children at the same stage of development in one area may be at a different stage in another. The extent of these apparent differences and the influences on rate and "evenness" of growth are among the concerns of developmental researchers. Thus generalizations in this field are difficult.

Even so, we can make reasonably accurate statements of children's views and understandings of the world at various broad stages. We will stop at the age of about 12, since by that time many, but not all, of the major developments in cognition will have been achieved by a substantial portion of children in the mainstream of our society.

I THE PRESCHOOL YEARS

A. Language. Language is the code by which the world and thoughts are deciphered, combined, and transmitted. The child's use of language is different than that of an adult. A child's first words, or more accurately semi-words, are not what we might think: they are not meant as representations of events or objects. Best thought puts them somewhere between a child's attempt to imitate a sound he has previously heard and his desire for some rudimentary form of communications. Thus, "Daddy" to a very young child can mean anything from "all men" to "Play a game with me". Or "Mama, ball" can indicate an object (that doesn't have to be a ball or even round) or "I-want-this-object-right-away". By the time the child is three or four, words come to be attached to more precise objects and events.

The child's use of words gradually increases to two-word sentences, then complete sentences, then sentences that are linked to each other. McNeil, a developmental linguist, has found that a child's grammatical production of speech does not start until about one year and is basically complete by three and one-half years.

Facile as the sounds and word usage may become, this still does not mean that the young child understands the ways in which language may be used. He is literal: he does not understand that a word can be used in more than one way, or that it can have more than one meaning. He does not understand the use of metaphor or simile. He does not understand how members of a class differ from one another (all cats are not the same) or how they are similar (apples, oranges, and

grapefruits are all fruit). These sophistications must await the child, later maturation, which usually occurs during school age.

B. Comprehension: Language is closely linked to conceptualization.

Although a child learns to understand a language before he speaks it (which means that children are often able to comprehend more than they can explain), his development still limits the amount and depth of that understanding. He does not know what is "true" or "false", "many" or "few", "near" or "far", "real" or "unreal". (This will become clearer when we discuss other aspects of cognitive development.)

We all realize this when we hear children parroting what we know they can not understand. The point is that although conceptualization is dependent on the acquisition of language, the child's actual use of language (which at 3 or 4 can seem perfectly logical and accurate in some children) is not necessarily a clue to his true understanding.

C. Perception: The great Swiss psychologist, Jean Piaget, has called the first 18 to 24 months of life the sensorimotor stage of development, which is characterized by random play. In this infant stage, the child can not distinguish separate objects. Beginnings, ends, tops, bottoms, insides, outsides, etc. are not understood. He is one with the world, and he probably relates to it through pleasure- or pain-producing sensations. At this time, one would guess that the TV is simply another one of those sensations--a source of sound, brightness, movement, and color.

Even very young children, however, will look at forms, particularly those that move. The baby first looks at objects offered to his view-- a face, a mobile, his own hands. Soon, however, the baby is attracted to new or changing stimuli. One sign of maturation is the baby's ability to be attracted by and to new stimuli, rather than persisting in looking at the same stimulus. Phylogenetic studies of the functions associated with increasingly complex neural developments suggest that humans have developed distinctive neural mechanisms to "screen out" constant stimulation and to "pay attention to" novel stimulation. One implication of these findings is that the television screen (particularly color TV, since babies are attracted earlier to color than to form) is likely to gain and hold infants' attention months before they can understand what is going on. This neurophysiological make-up of human beings, coupled with an early opportunity to watch television, would make it easy for babies to become "addicted" to watching the set until they are old enough to be able to do other things.

The dawn of perception of a world with distinct objects in it heralds the second or pre-logical stage of development, sometimes also called the stage of pre-operations. Now, the child is aware of a difference between his body and other humans and objects. As giant a step as this is, it is far from the perception as defined by an adult. Objects are perceived in the crudest sense. Because he does not have an established set of conceptual categories for classifying his perceptions, the child can not take in a "total" experience. So, he sees or relates to discrete items, and the world seems a panorama of juxtaposed parts. Reactions are to definite things or events, abstractions being achieved much later in development.

Perception increases with language development and use. Once a stimulus acquires a name, it is far likier to be noticed: e.g. once a child learns the terms for "apple" or "peach", he will note them more often, as well as the difference between them.

C. Memory-Recall of Material. This sporadic approach to the world applies to the child's memory or recall of material. Memory is a complicated mechanism, dependent on a number of factors such as association and experience. Some of it is helped by a mastery of sequence, another of the cognitive skills not yet achieved by the preschooler. (Sequence itself depends on the ability to classify, sort and select and to organize in concrete terms.)

This means, for example, that young children can not follow the thread of even a simple story. Nor can they recall sequence of events in a TV program or distinguish separate parts of a television program, such as the commercial and the program content.

Children will respond to and remember fragments of information that are often repeated, spoken by real or animated authority figures, or that seem to satisfy an impulsive need. The latter may be an explanation for children's fascination and recall of food commercials.

D. Fantasy and Reality--Truth and Reality. Harold Stevenson has said, "A clear sense of what is real and possible--as opposed to what is fanciful and imaginary--develops relatively late in a child's life." While older children are capable of differentiating between what they may perceive and what may be true, young children are dependent upon immediate perceptions. At an early age, for example, they may believe their dreams are real. Much of this fantasy, and displayed by role play, helps a child develop in his understanding and attitudes towards the world.

But the task of distinguishing reality and fantasy is complicated by the pseudo-reality of television where they see "real" people doing "real" things in "real" situations. By kindergarten age, children can usually tell that animated figures are not real, or that news programs are more "real" than advertisements, but perceptions and understanding of the full extent of television's pseudo-reality takes much, much longer to fathom. For the young child, it is safer to assume he will simply accept as fact the pseudo-real world he sees on television.

E. Construct of Reality: Number, Time, Distance, Space

How does this world of discrete objects look to the child?

The child's world of here and now has only the vaguest sense of number, time, and space. A three-year-old may be able to count to ten. (If he watches Sesame Street devotedly, he may even be able to count to 20.) That does not mean, however, that he understands that ten is a symbol for a specified number of objects, that this symbol is part of a spectrum of symbols each bearing a relationship to each other (ten is one more than nine and one less than eleven), or that it can refer to a group of single items (20 pegs) or a group of multiple items (20 groups). Most probably, the three-year-old could, if asked, correctly give you two or three items. Anything more would be a "lot" to him. As Piaget suggests, the child, through his experience with the verbalization of counting has come to sense the construct of the system in the sense that one number-name follows another and can correspond in a one to one manner with an object. But he has not yet reached the stage where he is able to analyse the relationship of that sequence. Piaget found (as did all of us with children) that the ability to count makes little difference

8

to the child's actual conception of numbers. In other words, from the preschooler's vantage, a "lot" of things can be any number over two or three, and phrases such as "fifty dollars" or "This costs only \$4.95 or .60¢" are interchangeable. At best, they all mean a lot, and a lot is virtually undefined.

Moreover, the child at this age is concerned with global comparisons, i.e. he equates the space objects take with their number. Given a choice of three M&M candies stretched over a plate and six M&Ms placed closed together he will invariably choose the latter ^{former} because his love of M&Ms and his mistaken understanding of space-number makes him think he is getting more.

As he nears five or six, he will begin to understand one-to-one relationships. That is, he can match equal numbers to different objects. Finally at the ages of 6-8, he will begin to recognize the ordinal and cardinal properties of number. Even then, his immaturity will prevent him from having a real sense of the meaning and worth of values or amounts. His status as a newcomer to life means that he has few effective gauges against which to measure a quantity.

Time is related to number. It is a very complicated notion, even for adults. It has two meanings: (1) Successiveness, i.e. the concept of a before, a simultaneity and an after and (2) duration, i.e. the concept of time as an equal and constant flow. Both of these do not develop until the elementary school years. In fact, young children often seem to confuse time with speed, equate duration with distance. Only when a child has mastered the concept of number sequence and duration can he understand a system of time measurement. Usually this doesn't appear until age 9 or 10.

For the young child, then, time is just another of the fuzzy items he can not understand. So, it makes no sense to tell a child to wait 15 minutes or an hour, or to talk to him of years past, when yesterday can seem an eon ago. The child, thus, is more vulnerable to what we adults experience and call the subjectivity of time. An interesting, pleasant experience seems much shorter than a boring or unpleasant one. We can lose track of time, when watching television, and be mystified when asked to "go outside and play for ^{only} 15 minutes". That is a long time.

A parallel illustration could be made for distance. The preschooler, bursting from his egocentric shell, finds the neighborhood a new and mysterious world. Grandmother's house, across town, is a long ways away. His sophisticated older brother, who may be experienced in jet travel, may have equally little sense of distance. To him, Grandmother's house, a thousand miles distant, is a pleasant journey.

Once again, television can complicate these still unformed concepts. As mentioned, the child is literal and selective in his approach to life. He responds to discrete elements. He does not know that the news program showing pictures of Vietnam is not taking place around the corner. He does not know that the dinosaur does not reside in the local zoo, or that Westerns depict times a century past, or that Misterogers does not live in the television set. Neither is he able to tell speed. As far as he is concerned, all those speedracers in the commercials look fast--and enticing.

F. Reasoning-Moral Judgment. As mentioned in the section on number, the preschool child has little sense of causality. He delights in being able to "make things happen" in his immediate world, such as pulling a chain that makes a bell ring. It is the complex system of distant (in his sense) times and places that are beyond him.

Up until 6 or 7, children have great difficulty in understanding both motives and consequences of action. Leifer and Roberts (1971) tested children for their understanding of the motives and consequences of violent actions in television programs. They found a direct correlation with age: their kindergarten subjects were able to barely understand either motives or consequences; third and sixth graders, about half of both; ninth and 12th graders, most of both. (A second experiment in this series suggests, however, that even a knowledge of the motivation and consequences associated with aggressive behaviors does not necessarily deter their happening.)

These authors suggest that a young child may be more influenced by the act itself than by any understanding of its intentions or aftermaths. Indeed, none of the young children had difficulty in telling the "good" guys from the "bad".

Piaget and others elaborating on his work, notably Kohlberg, (see ftnt. 1) postulate a stage level of moral development. Moral development in this sense does not mean actual choices made, but the reasons given for making the choices. The same choice can be regarded as an early stage of moral development, or an advanced one, depending on the extent to which ^{the} reason given embodies immediate gratification or the consideration of independently deduced moral principles.

Kohlberg identifies six levels of moral development, beginning with the satisfaction of basic impulsive needs or the fulfilling of commands issued by authorities. Blatt, in her study of ^{tv}commercial appeal, found, as predicted, the five-year-olds responded more often to precisely those ads that "told one what to do" or that satisfied an immediate craving.

Moral judgment, then, for the young child is likely to follow the path of obedience to commands or impulses. Though he can learn to classify a good act from a bad one (in a way with which most adults would agree,) the child has no idea how it comes to that conclusion. He still does not understand right and wrong as moral principles, or comprehend motivation. Because of his maturational inability to understand intention and consequence, there has arisen a tradition in law that automatically assumes all children under seven innocent of any crime they may have committed.

F. Learning and Social Behavior: Imitation and Modeling

There has been much research in the past decade that shows children can and do learn an extensive range of behaviors from observing living, film or TV models. Children can learn specific new behaviors this way, like judo or painting; behaviors they already possess can be reinforced; or they can ^{learn} ₁₃ certain rote cognitive skills.

This learning can be both beneficial and harmful. Stein and Friedrich ¹⁴ (1971) found that children who watched Misterogers Neighborhood gained in self-control and task persistence, while those watching aggressive cartoons such as Batman became more aggressive. That children can and do learn to engage in aggressive acts learned from television is now beyond dispute. To quote from the Surgeon General's report Television and Growing Up: The Impact of Televised Violence, "...The fact that children can mimic film-mediated aggressive behavior is perhaps the

-11-

best documented finding in the research literature on the effects of pictorial media..."¹⁵ Every member of the Surgeon General's Advisory Committee, that produced this report, testified that there can be no doubt now of the causal relationship between the aggression seen on the TV screen and that committed afterwards.¹⁶

The point is clear: learning is gained through observation and imitation. Even more compellingly, observation and imitation can act as releasers or sanctions for selecting which behavior the child will express. Seeing a hero figure (powerful, controlling, a center of attention) express aggression can provide a sanction that might encourage a child to do the same later. It would, of course, follow that cooperative behavior, or that seeking alternatives to violence, would also be "sanctioned" through the model on the TV screen. Much children's television fare, however, in Sanford's phrase, provide "sanctions for evil."

Because of their immature development and lack of understanding, young children are particularly susceptible to the influence of adults, whether real or on TV. Television, itself, has become an important source of information and socialization to our children. (This will be discussed further in the Truth-Reality section of the Elementary School Year.)

-12-

II THE ELEMENTARY SCHOOL YEARS

A. Language Use. Two significant changes occur in the language of children during the elementary school years: it changes focus and becomes more flexible.

The young child tends to engage in what has been called egocentric speech. His words are often directed to no one in particular because he really can not put himself in the position of his listener. He chants on, often, with little concern for being understood.

Speech begins to change at about six years, when the child becomes aware of how others feel and can put himself in the place of the other. At about the same time, his sentences are becoming more complex, as are the ways in which he uses words. He is now beginning to understand that objects have their specific and general labels and that labels can be used differently.

((To refer to an earlier example, he can now clearly tell that all cats are not the same (members of a class differ) or that oranges, grapefruits and apples are all fruit.))

Throughout the school years, children's use of language becomes increasingly complex. Qualifying and elaborating words and clauses are included in sentences. Vocabulary increases, as does the use of metaphor and simile. Finally by adolescence, subtle variations, such as sarcasm and irony, are used to convey further information.

These changes apply to all children, regardless of their use of grammar or dialect. It is the context and understanding that

-13-

imply the development, not what some would consider "correct usage".

B. Perception: Perception, as noted, tends to become more specific with age and language acquisition. Characteristics of the developmental changes in perception common to all children are the increased tendency to: (1) analyze stimuli (that apple looks different from the one I ate yesterday) (2) produce clear interpretations of ambiguous stimuli (like a Rorschach test) and (3) the use of abstract language (words such as problem, discussion, etc.) Some children, for instance, will concentrate on particular parts (the birthday cake at John's party); others, the overall effect (it was exciting); and still others, both.

17

C. Memory-Recall of Material. Because of his increasing understanding and use of language, the child's memory greatly improves during the school years. He remembers more, and he can put some order into his string of recall.

Blatt's work with children's responses to TV advertisements suggests that response-recall may be related to a child's state of ego development. Kindergarteners remembered food commercials most; second graders, sex specific objects such as dolls and racing cars; fourth graders, cleaning products; and sixth graders, the message, not the product. Furthermore she found a difference in the complexity of recall--the younger children being able to identify a single aspect or image from a commercial; the oldest, a complete and precise recreation of an advertisement with the focus on the message, not the elements.

18

-14-

D. Fantasy- Reality--Truth-Reality. The young student has no trouble at all telling the worlds of make-believe from that of real life. Older children, furthermore, are capable of differentiating what they perceive from what may be true, i.e. the commercial that describes a real product is not telling the truth.

Television adds a new wrinkle to reality--believability. As mentioned earlier, the young child has no way of telling that the "real" people, actions, and situations on television are often just representations. What look real, they believe is real. So, apparently, do older children.

19

Researchers such as Greenberg, Dominick, and Gordon, who have conducted a number of studies on the "believability" of television, conclude that children and even adolescents believe, more of what they see on television than most adults realize. They feel that television is becoming more and more of a primary experience and exposure for children--a major source of information on the world's people and ways. All television serves this function, even the adult entertainment programs. Children with less access to a variety of experiences (such as poor children or some black children) are more likely to find television a credible mirror/ of life. Other researchers, particularly Ward in his studies of the "Effects of Television Advertising on Children and Adolescents"²⁰ and Lyle and Hoffman's²¹ massive studies of children's viewing patterns found a pervasive distrust of television, especially its commercials.

It still bears noting, however, that the child needs a good deal of experience of his own to be able to tell the difference between actual and implied reality. ✓

E. Cognitive Development

The child's cognitive development passes through three significant milestones during the elementary school years. He acquires the concepts of conservation and reversibility and begins to use logical and abstract reasoning. The young child's selective and fuzzy world of discrete objects is now beginning to be seen as one with stable characteristics and relationships. These developments occur during the child seventh to eleventh years, approximately.

As the child masters the concept of conservation, he is able to understand that a given quantity of matter remains unchanged, even though it is placed in different containers or in different contexts. For example, when milk is poured from a tall, thin glass into a short, squat glass, the older child will recognize that the amount of milk is the same. The younger child thinks there is more milk when it is in the tall, thin glass. A similar understanding of the conservation of weight and volume also occurs during the elementary school years.

Once conservation is understood, the child's sense of number, time, and space is enhanced, too, although as anyone who has taught or raised children knows, this is also tempered by experience. One does not understand the meaning of amounts (\$1.00 or \$10.00) until one has handled and earned money. These understandings will also be subject to different interpretations, based on the child's background and personal sensitivities.

-16-

Another of the milestones of cognitive development is the understanding of the concept of reversibility. Once the child understands that abstract operations are reversible, he is able to (1) start thinking about a problem, stop at some point, and go back to the beginning without losing the thread of the problem and (2) understand that certain operations can be cancelled through complementary operations: $1 + 1 = 2$, $2 - 1 = 1$. Boiled water produces vapor; condensed vapor yields water.

Conservation and reversibility are the beginning of the child's awareness of the existence of rules and relationships. He will begin unconsciously to apply rules to the phenomena he observes. Two types of logical rules appear at this time: class inclusion operations and serial ordering.

Class inclusion, etc. simply means the ability to think about parts and wholes independently. The young child can not do this. If you give a five-year-old a box of 10 red and 2 white rubber balls and ask him, "Are there more red balls or rubber balls?", he is apt to answer "red balls." He is not yet at the stage where he can understand that an object can be classified in two (or more) ways at one time. The eight- or nine-year-old has no trouble with this at all. In fact, to most, it is obvious.

Serial ordering is the ability to put a group of unequal objects in order of size. It presupposes an understanding of "greater than" and "lesser than". If a child understands that, he is ready to go on to problems such as, If A is bigger than B and B, bigger than C, then A must be bigger than C.

-17-

Admittedly, these are sophisticated ideas, and many children this age can not approach problems of class inclusion or serial ordering without having actual objects to manipulate. But they are aware of rules and conservations. The only step remaining is the ability to be aware of thoughts as thoughts--the basis of self-criticism, reflection and analysis, hypothesis. ²²

F. Moral Judgment. Moral judgment is partially a function of learning. The small child, limited in both his experience and exposure, depends on his family for a definition of good and bad, right and wrong. At his age, these tend to be absolute judgments.

These rigid concepts are modified during the early school years to moral judgments that take into account situations, motives, norms, and group values. In addition to the feelings of his family, the child is now increasingly affected by the ways and thoughts of his friends and classmates. He wants to conform at this age, and much of his moral evaluation of situations and actions will be based on either his concepts of what others his age are doing or what he thinks his group would consider proper. Blatt in her study of the appeal of commercials, for example, discovered that elementary school aged children responded to appeals reenforcing their desire for social conformity or approval, while their younger brothers and sisters were far more impressed with appeals by authority figures (real or cartoon) or those meeting impulsive needs, such as ads for foods or snacks.

-18-

Evaluations of moral situations on a higher plane--i.e. based on the concepts of enduring rules or traditions, social use (the will of the majority), or higher principles (all life is sacred)--comes much later, during adolescence, if at all. The child of the early school years has a limited capacity to evaluate accurately situations or commercials he sees on the TV screen. He may accept or reject them, but he cannot give a rationale for his conclusion.

G. Learning: Imitation. One can only state in this section what was said in that on younger children: that children learn behaviors from observing and imitating models, and that much is learned this way from television. To repeat, the Surgeon General's Report and Advisory Committee on the Impact of Televised Violence found overwhelming evidence that some of the aggressive acts committed by children are first seen on TV. And to reiterate a finding of Leifer and Roberts, knowing the motivation or consequence of an aggressive act is not necessarily a deterrent.

Even though the older child has gained an understanding and the 10- and 11-year-old can begin to evaluate some of what they see, they are still victims, so to speak, of their immaturity and inexperience. Too many children hold to the dictum: seeing is believing. Too many children take at face value the information seen on television.

-19-

CONCLUSION

The development of most children, as we have seen, follows a sequential pattern. While the pattern seems heavily dependent on growth and experiences, attempts to radically accelerate this development have not been promising. (e.g. teaching babies barely able to talk the basis for moral judgments). Parents and teachers can do a great deal to help children make certain discriminations at certain ages, such as those about the reality and pseudo-reality we have discussed. However, it is unrealistic to place the burden of this on the parents or the child, whose development is not benefited by trying to compress cognitive stages.

The task, rather, as far as television is concerned, is to change it and its underlying attitudes towards children. We must understand the differences between children's and adults' conceptual abilities and take these into account in the creation and presentation of material for children. We must also admit that, because of these differences, some material may be totally inappropriate for children's viewing.

FOOTNOTES

1. For example, Eric Ericson in Childhood and Society New York: Norton, 1950 and 1959 speaks of eight stages of development:

A-Basic trust (concern with basic oral needs) -infancy
 B-Autonomy (Concern with Control over one's body)-walking,sitting 1-3 yrs.
 C-Initiative(Concern with personal expression & sex role identity) 3-6 yrs.
 D-Industry (Concern with competence and peer cooperation) 6-12 yrs.
 E-Identity(Concern with lasting self-image) puberty & adolescence
 F-Intimacy (Concern with love & finding a mate) young adulthood
 G-Generativity (Concern with one's life work) adulthood
 F-Integrity (Concern with final judgment of one's life) maturity

Kohlberg, L. in "Moral Development". International Encyclopedia of The Social Sciences, Vol. 10, 1968, pp 483-494 & elsewhere has identified six stages of cognitive-judgmental reasoning on moral situations.

A-Decisions made in deference to superior authority, or to avoid punishment.

B-Decisions made on basis of hedonistic self-interest

C- " " " " conformity and social approval

D- " " " " enduring rules of law

E- " " " " social utility

F- " " " " higher moral principles.

These are not constant; it is possible to make decisions on all six bases.

2. Piaget, as explained in Baldwin, Alfred. Theories of Child Development. New York: John Wiley & Sons, 1967. P. 237.

Also in Hunt, J. McV. Intelligence and Experience. New York: Ronald Press, 1961 pp 222-225.

3. McNeill, David. "Developmental Psycholinguistics". In: The Genesis of Language. Cambridge, Mass: Massachusetts Institute of Technology Press, 1966. pp 17-84. As cited in Cognitive and Mental Development in The First Five Years of Life by Liechtenburg & Norton. Chevy Chase, Md.: National Institute of Mental Health. 1970.

4. Klepper, H.L. "Did Anyone Do Anything that Would Be Wrong For You to Do?": children's perceptions and moral evaluations of television programs. Paper presented at the American Association for Public Opinion Research. Bolton's Landing, New York: May 1969. Cited in Television and Growing Up: The Impact of Televised Violence. Report of the Surgeon General from his Special Advisory Committee on Television and Social Behavior. Washington D.C.:Government Printing Office. 1971

5. Leifer, A. D. & Roberts, D. F. "Children's Responses to Television Violence". In J.P. Murray & E. A. Rubinstein & G.A. Comstock (eds.) Television and Social Behavior Vol 2 Television and Social Learning. Washington: Government Printing Office, 1971.

Also Halloran, J.D. Patrik and Patrik: Reports on International Evaluations of Children's Reactions to the Swedish Television Programme. Munich: Internationales Zentralinstitut für das Jugend und Bildungs Fernsehen, 1969.

6. Blatt, J., Spencer, L., & Ward, S. "A Cognitive Developmental Study of Children's Reactions to Television Advertising". In: Effects of Television Advertising on Children & Adolescents. Cambridge: Market Science Institute, 1971.
7. Stevenson, H. "Television and Preschool Children" In J.P. Murray & E. A. Rubinstein & G.A. Comstock (eds.) Television and Social Behavior. Vol. 2. Television and Social Learning. Washington: Government Printing Office, 1971, p. 304.
- 7-A. Blatt, J. Op. cit.
8. Piaget, Jean. Child's Conception of Number. New York: Humanities Press, 1964. p. 64.
9. Hunt, J. McV. Op. Cit. pp 222-225.
10. Leifer, A. & Roberts, D.F. Op. Cit.
11. Blatt, J., Spencer, L. & Ward, S. Op. Cit. pp 25-26.
12. Some of the major investigators and reviewers of research in this field of research are: Bandura, R.H. Walters, J.P. Flanders, W.W. Hartup & B. Coates, D. F. Roberts, D. Ross, and S. Ross.
13. See: Ball, S. & Bogatz, E.A. The First Year of Sesame Street: An Evaluation. Princeton: Educational Testing Service, 1970.
and
Bogatz, E.A. & Ball, S. The Second Year of Sesame Street: An Evaluation, 1970.
14. Stein, A. H. & Freidrich, L.K. "Television Content and Young Children". In: Television and Social Behavior, Vol. II, op. cit.
15. Television and Growing Up, The Impact of Televised Violence, op. cit p. 103.

16. See proceedings of: Hearings Before the Subcommittee on Communications of the Committee on Commerce, U.S. Senate, March 21, 1972. Serial 92-52 Washington: Government Printing Office. PP 25-80.
17. Mussen, Conger, & Kagan. Child Development and Personality: Second Edition New York: Harper & Row, 1963. pp 474-75.
18. Blatt, J., Spencer, L. & Ward, S. Op Cit., pp 12-14.
19. These gentlemen have conducted numerous studies on the differences in perception and use of television by children of various ages, classes and races. A few are, in chronological order:
 Greenberg, B. & Dominick, J. "Racial and Social Class Differences in teenagers' Use of Television". Journal of Broadcasting, 13:3331-3344, 1969.
 Greenberg, B. & Dominick, J. "Television Behavior Among Disadvantaged Children". CUP Research Report, Department of Communication, Michigan State University, 1969.
 Greenberg, B. & Gordon, T. "Children's Perceptions of Violence: A Replication" and "Social Class and Racial Differences in Children's Perceptions of Televised Violence". Both in: G.A. Comstock & E.A. Rubinstein (Eds.) Television and Social Behavior, Vol. 5 Television's Effects: Further Explorations. Washington: Government Printing Office, 1971 (a) & (c)
 Some conclusions were also received in private communication with Prof. Greenberg.
20. Ward, S. Op. Cit in ftnt. 6 supra.
21. Lyle, J. & Hoffman, H. "Children's Use of Television and Other Media" and "Explorations in patterns of Television Viewing by Pre-School-age Children". Both in: E.A. Rubinstein, G.A. Comstock, & J.P. Murray (eds.) Television and Social Behavior. Vol. 4 Television in Day-to-Day Life: Patterns of Use. Washington: Government Printing Office, 1971 (a) & (b).
22. Mussen, Conger, & Kagan, op.cit. 466-71.

RADIO T.V. REPORTS, INC.

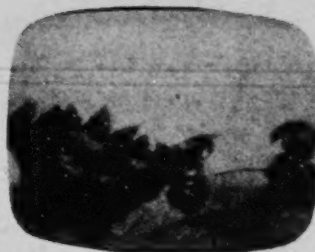
PRODUCT:
PROGRAM:

KELLOGGS COCOA KRISPIES
DASTARDLY & MUTTLEY - 3/28/70
WCBS-TV (NEW YORK)

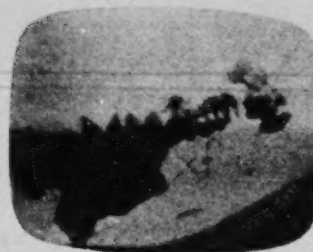
#01116
9:40AM
30SEC.



1. MAN: Kids, you know how good Kelloggs Cocoa Krispies are for breakfast.



2. How they taste like a chocolate milk shake only crunchy.



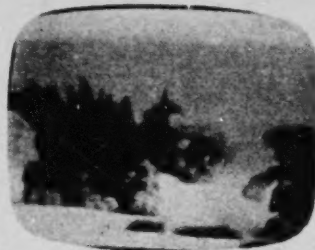
3. Gives you lots of energy good wind. But us cave-men like them for another reason, too.



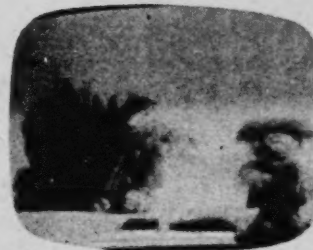
4. You can eat them on the run for snacks.



5. And when the box is empty its easy to dispose of.



6. (SFX)



7. (SFX)



8. Better luck next time fella.

RADIO T.V. REPORTS, INC.

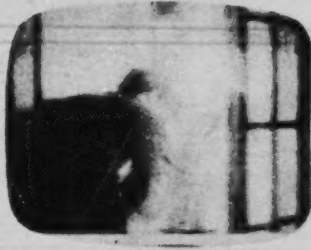
PRODUCT:
PROGRAM:

CHEERIOS
FAMILY AFFAIR - 2/12/70
WCBS-TV (NEW YORK)

#0511
7:50PM
30 SEC.



1. GIRL: This is my father.
He makes firewood.
(MUSIC)



2. Lifts big heavy chairs,



3. takes me to the zoo.



4. Where does he get
his go? From me. I
lend him my Cheerios.



5. Because a Cheerio break-
fast gives him lots of oat
protein and energy. Same
as me.



6. And we both like the
taste.



7. Give your dad some
Cheerios,



8. and maybe he'll let
you take home a
lion.

RADIO T.V. REPORTS, INC.

I - 3

PRODUCT:

KELLOGG'S SUGAR FROSTED FLAKES

#0533

PROGRAM:

BANANA SPLITS

2/14/70

10:33AM

WNBC-TV

(NEW YORK)

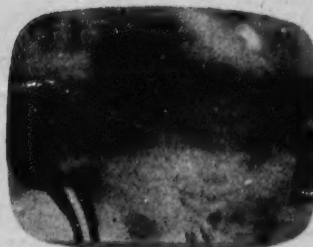
30 SEC.



1. TONY: That's the way little lady, keep on eating those



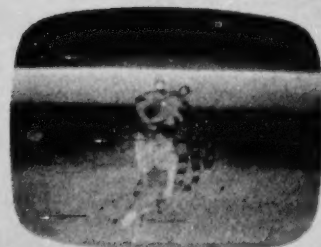
2. Sugar Frosted Flakes and you'll be a tiger in no time.



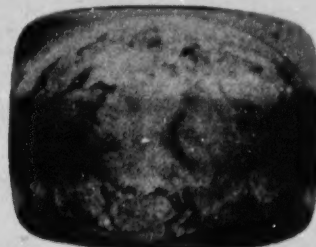
3. GIRL: Grrrr-great. (MUSIC)



4. TONY SINGS: Go with Tony the Tiger and get what it takes.



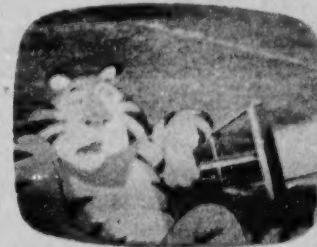
5. To start every morning with Kellogg's Sugar Frosted Flakes.



6. SAYS: Big crisp flakes with a secret toasted sugar frosting.



7. CHILDREN: TIGER, go with the tiger. (SFX)



8. TONY: That's the old team spirit.



9. (SILENT)



1. TONY: Attaboy, just keep at those...



2. ...Sugar Frosted Flakes...

3. ...and you'll be a tiger.
KID: Grrreatttt!

4. (Musical effect.)



5. SONG: Go with Tony the Tiger...



6. ...and get what it takes.



7. To start every morning...



8. ...Kellogg's Sugar Frosted Flakes.



9. TONY: Greeaat big flakes...



10. ...with a secret toasted-in sugar frosting.



11. SONG: With Kellogg sugar Frosted Flakes.

12. You're a tiger...
KID: Rrrrrroar!13. SONG: ...on the go.
TONY: Wait for me!

14. (Musical effects)



15. Goooo with the Tiger!

TELEVISION

Knox Reeves Advertising I - 5

400 Second Avenue South, Minneapolis, Minnesota 55401
Telephone 339-0071

AGENCY CONTACT: Maria Vasiliou

DATE TYPED: 3/13/60 :00

CLIENT: GMI

COMMERCIAL NUMBER: W-294X-300

PRODUCT: Wheaties

TITLE: "What's Wrong With This Picture?"

JOB NUMBER: GMI 9620

COMMERCIAL LENGTH: :30

SCHEDULE:

AUDIO: ☐ LIVE ☐ FILM ☐ VTR ☐ ET

PROP LIST:

VIDEO: ☐ LIVE ☐ FILM ☐ VTR

☐ SLIDES OR TELOPS

VIDEO

1. DOWNSHOT, BACKYARD OF SUBURBAN HOME. FAMILY, FATHER, MOTHER, SON, TAKING IN THE SUN AND RELAXING LUXURIOUSLY.
2. SWISH PAN ACROSS ROOF OF HOUSE TO...
3. DRIVEWAY OF HOUSE NEXT DOOR. THREE PEOPLE RIDING BICYCLES VIGOROUSLY TOWARD STREET.
4. CUT TO FAMILY COMING OUT OF GARAGE ON BICYCLES. FAMILY FALLS INTO LINE, 3 ABREAST.
5. RICHARDS SWINGS INTO LINE ON A BIKE.
6. BOOM UP AS CYCLISTS PASS UNDERNEATH.
7. GROUP BICYCLES TOGETHER AS PACKAGE MOVES INTO FRAMES.
8. PACKAGE CONTINUES TO MOVE ACROSS FRAMING SCENE. LINE "GET UP...GET UP...GET GOING".
- 9.

AUDIO

1. RICHARDS (VO): What's wrong with this picture? There's no action.
- 2.
3. Active people are happy people.
4. They like to get up, get out and get going. And Wheaties can help.
5. Wheaties is 90% energy, 100% flavor.
6. Everything you want from a cereal.
7. So, get up ...
8. get out ...
9. and get going--with Wheaties!

Radio TV Reports

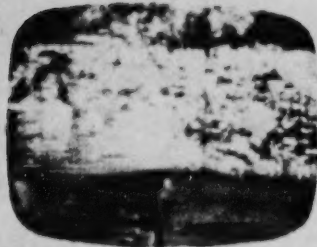
41 East 42nd Street New York N.Y. 10017
(212) 697-5100

PRODUCT:
PROGRAM:

POST PEBBLES
EMERGENCY
WNBC-TV

9/6/75
(NEW YORK)

756885
30 SEC.
8:08 AM



1. CHILDREN: Hi Fred and Barney.



2. FRED AND BARNEY: Hi kids.



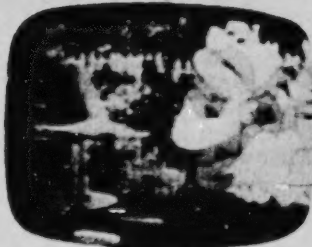
3. FRED: I wish I had the fruity-licious flavor of Fruity Pebbles.



4. BARNEY: And those chocolaty goodies in Cocoa Pebbles.



5. BOY: What will you trade us for them?



6. BARNEY: I'll trade you Fred.
FRED: Barney!



7. BARNEY: Boy, Fruity and Cocoa Pebbles are part of a balanced breakfast.



8. CHILD: There's an inflatable toy inside.



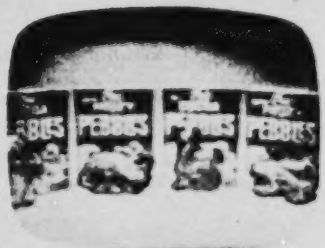
9. CHILD: There's a bright color dinosaur on it.



10. You can collect four different dinosaurs.



11. CHILD: You can decorate your own.



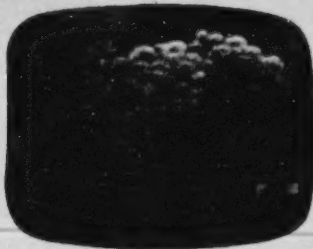
12. BARNEY: One dinosaur inflatable pillow in each specially marked box of Post Fruity or Cocoa Pebbles Cereal.

Radio TV Reports

41 East 42nd Street New York N.Y. 10017
(212) 697-5100

PRODUCT: FRUITY FREAKIES CEREAL
PROGRAM: SPACE NUTS 1/3/76
WCBS-TV (NEW YORK)

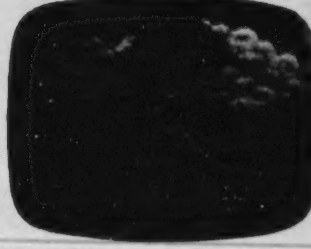
760093
30 SEC.
11:06AM



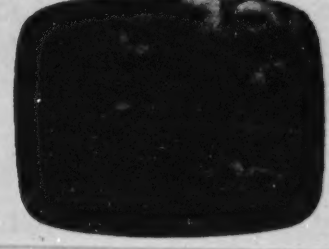
1. VOICE: Hey, there's a fruit basket on your head.



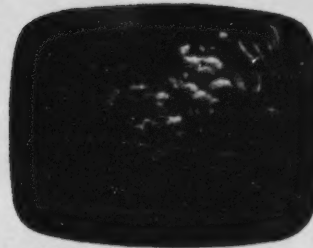
2. VOICE: I know. The delicious fruity taste of new Fruity Freakies Cereal



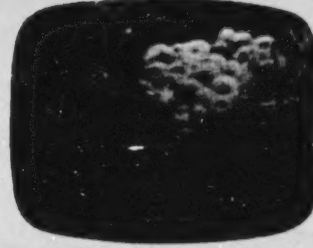
3. makes you feel like you're wearing fruit on your head.



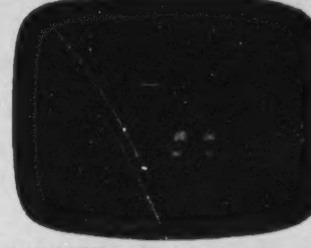
4. VOICE: I don't believe it.



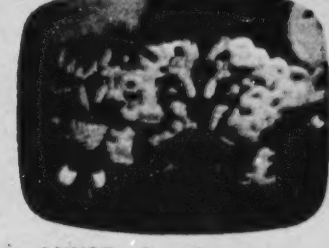
5. VOICE: Well, why don't you try a piece smarty?



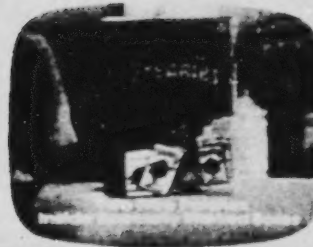
6. VOICE: Hey, new Fruity Freakies taste so fruity I do feel like I got fruit on my head.



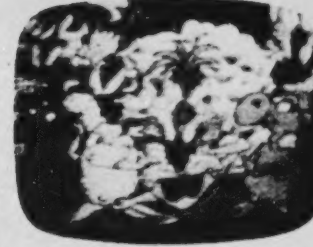
7. VOICE: I like the pink ones best.



8. ANNCR: Crunchy new Fruity Freakies can be part of your nutritious breakfast.



9. And you get two free iron-on patches in specially marked boxes.

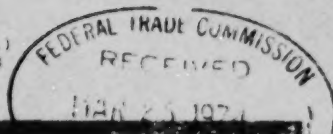


10. VOICE: How do I get this thing off?

Campbell-Mithun, Inc. ADVERTISING

300 Madison Avenue, New York, N.Y. 10017 Tel. 212-750-7000

CLIENT: General Mills, Inc.
 PRODUCT: Breakfast Squares
 CODE NO./TITLE: GIC01433/Student (Rev.)
 JOB NO: 4-114-067 DATE: Dec., 1973



1. (Up)



2. STUDENT: For breakfast...



3. ...I'm a sugar donut!



4. I'm a student first.
 nutritious breakfast.



5. STUDENT: Nutrition's okay...
 s'long as it tastes good.



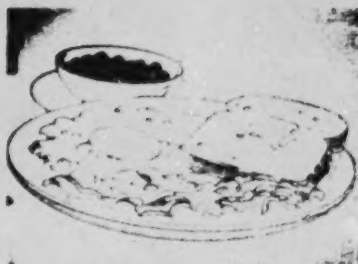
6. So, I grab Breakfast Squares.
 They're new!



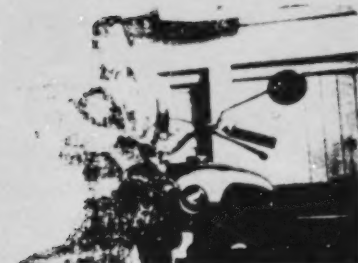
7. Two Breakfast Squares
 complete light



8. ...with as much food energy,
 basic vitamins and basic
 minerals...



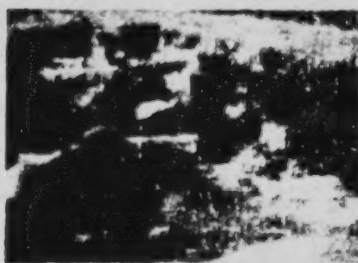
9. (VIDEO) One piece has
 (ANNCR) ... as this bacon
 and egg breakfast.



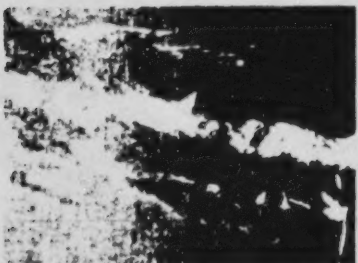
10. ...with as much protein.



11. STUDENT: Nifty!



12. (Anner VO) In a heartbeat,
 butter pecan...



13. ...the malt and
 ...



14. STUDENT: Powerful little
 goodies...



15. ...I need to speed...

1st CBS Broadcast Kojak, 1/16/74, 10-11 PM

DANCER - FITZGERALD - SAMPLE, INC.

Client: CPC

Title: "SWIMMING HOLE"

Product: SKIPPY PEANUT BUTTER

Commercial No.: CGSP 0235

As Filmed/Recorded: (COLOR)

Date: 7/11/75

Length: 30 SECONDS



1. SUNG: Why do kids like to get hungry?

2. Why do they want to

3. work up their appetites?

4. CHORUS: So they can eat



5. more Skippy.

6. Enjoy more Skippy.

7. Spread more Skippy all around.

8. So they can eat



9. more Skippy.

10. Enjoy more Skippy.

11. (MUSIC BEAT) Spread more Skippy all around. ANNCR: (VO) Skippy Peanut Butter.

12. The reason kids like to get hungry.

Radio TV Reports

41 East 42nd Street New York N.Y. 10017
(212) 697-5100

PRODUCT
PROGRAM

POST HONEYCOMBS CEREAL

GILLIGAN'S ISLAND 4/19/75
WABC-TV (NEW YORK)

752978

30 SEC.

9:39 AM



1. HONEYCOMBS: Come to the Honeycomb Hideout.

2. JONES: I'm Big Boulder Jones. And I want a big cereal.

3. CHILDREN SING: Honeycomb's big, yeah, yeah, yeah.

4. It's not small. No, no, no.

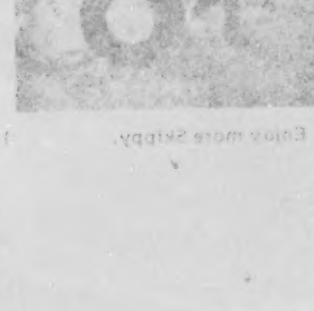
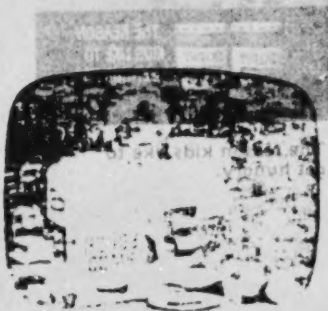


5. Honeycomb's got a big, big bite.

6. Big, big taste in a big, big bite.

7. JONES: Right. Post Honeycomb Cereal

8. Is part of a balanced breakfast. And it's got a big bite.



9. JONES SINGS: It tastes right.

10. CHILDREN SING: Honeycomb bite, big, big bite.

11. Enjoy more Kippy.

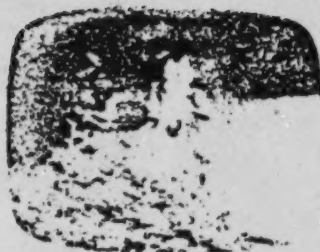
12. more Kippy.

PRODUCT: KELLOGG'S SUGAR SMACKS
 PROGRAM: SCOOPY DO 7/17/71
 WCBS-TV (NEW YORK)

713772
 30 SEC.
 12:14PM



1. (MUSIC)



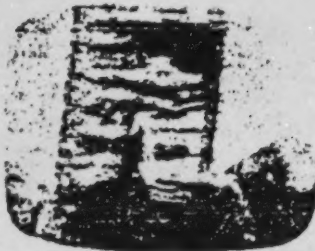
2. ANNCR: It took stamina, energy and strength



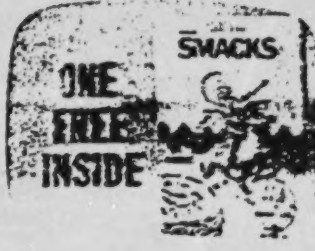
3. to be an American Indian.



4. Now learn about Indian life



5. with 3-D Indian cards.



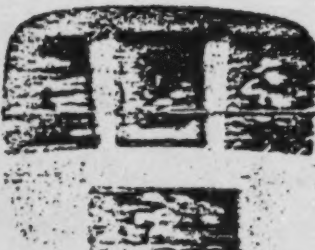
6. Free in specially marked packages of Kellogg's Sugar Smacks Cereal,



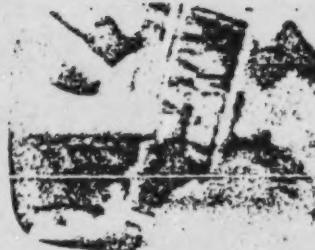
7. a delicious breakfast food Indian style



8. and fortified with eight vitamins.



9. Sixteen colorful cards with



10. three-dimensional Indian pictures



11. and stories.



12. One free in specially marked packages of Kellogg's Sugar Smacks.

RADIO T.V. REPORTS, INC.

PRODUCT
PROGRAM

5TH AVENUE
ACTION NEWS
WBBM-TV

10/25/71
(CHICAGO)

H-715828
30 SEC.
6:02PM



1. ANNCR: Famous people love 5th Avenue.



2. TENNIS PLAYER: Between sets I always grab a 5th Avenue Candy Bar



3. with its crunchy peanut butter center.



4. It's done wonders for my serve.



5. Or is it my backhand?



6. MAN: As a world famous archaeologist



7. I dig 5th Avenue.



8. CHEF: (SPEAKS IN ITALIAN)



9. CHEF: (SPEAKS IN ITALIAN) 10. ANNCR: Buy 5th Avenue



11. at Walgreens complete candy center.

Radio TV Reports

41 East 42nd Street New York N.Y. 10017
(212) 697-5100

PRODUC
PROGRAM

CHEERIOS
MOVIE
WABC-TV

3/31/75
(NEW YORK)

I - 13

752409
30 SEC.
12:00 AM



1. CHORUS SING: Gonna get a powerful start today.



2. (MUSIC)



3. Gonna have some powerful good Cheerios.



4. You get a pow - pow - powerful



5. good, good feeling



6. with Cheer, Cheer, Cheerios



7. (MUSIC)



8. ANNCR: Toast, juice, milk and Cheerios.



9. Powerful good.



10. CHORUS SING: Cheerios. Cheerios.



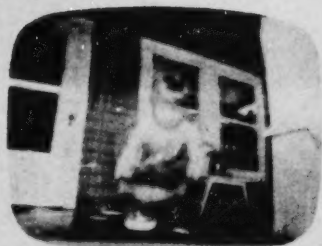
11. (MUSIC)

RADIO T.V. REPORTS, INC.

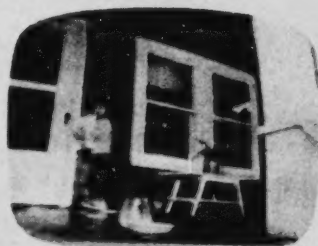
PRODUCT:
PROGRAM:

KELLOGG'S CORN FLAKES
DASTARDLY MUTTLEY
WCBS-TV (NEW YORK)

02897
30 SEC.
9:31AM



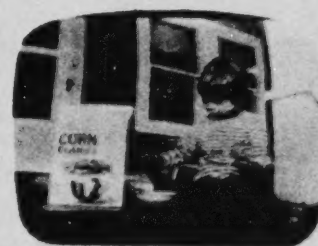
1. CHORUS SINGS: Oh, crispy,
crunchy, chewy, munchy



2. soon a spoon



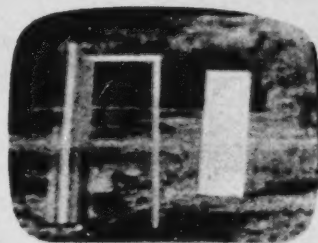
3. of Kellogg's Corn Flakes.



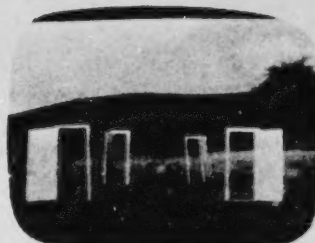
4. It's the way to start



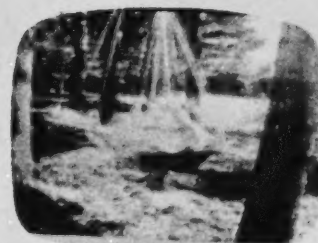
5. to guess where you want to
be



6. hunning, rolling,



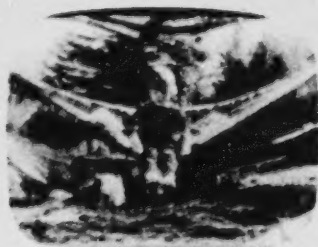
7. floating, ..



8. moving, turning.



9. throwing, smiling grooving,
calling, jumping high and
never falling



10. Kellogg's Corn Flakes takes
you all the way.



11. It's the way to start to get
where you want to be ...

Radio TV Reports

41 East 42nd Street New York N.Y. 10017
(212) 697-5100

PRODUCT: ALPO DOG FOOD
PROGRAM: ANOTHER WORLD
WNBC-TV

3/3/75
(NEW YORK)

751649
30 SEC.
3:21 PM



1. WOMAN: Some roommate!



2. How can I leave my dog with you? You didn't get him Alpo.



3. 2nd WOMAN: Dog food's dog food.



4. WOMAN: Read the label.
2nd WOMAN (READS):
Meat by products and
barley -- that's cereal!



5. WOMAN: Now Alpo
Beef Chunks dinner.



6. 2nd WOMAN (READS):
Meat by products, beef...



7. Not a speck of cereal.



8. WOMAN: It's got the beef
he loves, plus soy, vitamins
and minerals for a complete
diet.



9. 2nd WOMAN: Your majesty,
dinner is served.



10. ANNCR: Doesn't your
dog deserve Alpo?

Radio TV Reports

41 East 42nd Street New York N.Y. 10017
(212) 697-5100

PRODUCT: KAL KAN DOG FOOD AND CAT FOOD
PROGRAM: MIKE DOUGLAS
6/27/75
WCBS-TV
(NEW YORK)

755020
30 SEC.
4:44 PM



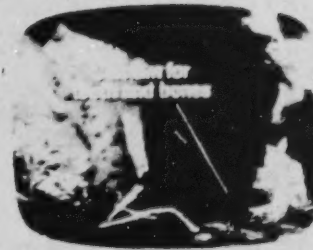
1. ANNCR: Kal Kan Dog Food is more nutritious than 100% meat.



2. Kal Kan starts with plenty of meat by-products like liver for strong muscles.



3. But Kal Kan also have vitamins for sharper eyes,



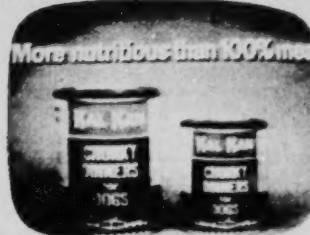
4. calcium for teeth and bones,



5. vegetable products for good digestion.



6. And whole egg for a shiny coat.



7. Kal Kan, more nutritious than 100% meat.



8. And Kal Kan Cat Food.



9. It's also more nutritious than 100% meat.

APPENDIX L

Using the Broadcast Advertisers Report (BAR) for a random week, May 18, 1975, and with the assistance of the viewing practices illustrated in the December 4, 1974 CBS Memorandum (Appendix D) we estimate the number of food commercials seen by a child using four alternative schedules:

<u>DAY AND TIME</u>	<u>WEEKLY # HOURS WATCHED</u>	<u>WEEKLY # FOOD ADS SEEN</u>	<u>AD WEEKLY TOTAL</u>	<u>ANNUAL TOTAL</u>
Saturday a.m.	3	12	36	
Sunday a.m.	1	9	9	
Saturday p.m.	2	3	6	
Sunday p.m.	2	4	8	
Weekday p.m. (aftn)*	6	11	66	
Weekday p.m. (evening)	<u>10</u>	<u>4</u>	<u>40</u>	
	24	43	165	8,580
Saturday a.m.	3.5	12	42	
Sunday a.m.	1.5	9	13	
Saturday p.m.	1	3	3	
Sunday p.m.	1	4	4	
Weekday p.m. (aftn.)*	10	11	110	
Weekday p.m. (evening)	5	4	20	
Public Broadcast Program	<u>2</u>	<u>0</u>	<u>0</u>	
	24	43	192	9,984
Saturday a.m.	4	12	48	
Sunday a.m.	1	9	9	
Saturday p.m.	1	3	3	
Sunday p.m.	1	4	4	
Weekday p.m. (aftn)*	12	11	132	
Weekday p.m. (evening)	<u>5</u>	<u>4</u>	<u>20</u>	
	24	43	216	11,232
Saturday a.m.	4	12	48	
Sunday a.m.	2	9	18	
Saturday p.m.	2	3	6	
Sunday p.m.	2	4	8	
Weekday p.m. (aftn)*	10	11	110	
Weekday p.m. (evening)	10	4	40	
Weekday a.m.	<u>5</u>	<u>5</u>	<u>25</u>	
	35	48	255	13,260

* Barcus, Dr. F. Earle, Boston University School of Public Communications, Television in the Afternoon Hours, October, 1975; Table 23, pg. 30.

CHILDREN AND TRADE REGULATION RULES:

A LEGAL PERSPECTIVE

Childhood is unique segment of the human experience. It is a time of play, exploration, discovery and experimentation. Recognizing a child's proclivity for predictable excesses, society has historically provided children with certain informal and institutional safeguards which protect them from the more onerous consequences of their behaviour.

As parents we make constant note of our children's susceptibilities. They are taught how to cross streets; about watching for strangers and about washing their hands before eating. As a society, we have agreed upon restrictions and regulations of children's working conditions, date of emancipation, right to enter into contract, tort liability and school attendance among others. Much of this concern has found expression in the common law.

"The infant has always been a favorite of the law. From early times the common law has made exceptions to the ordinary rules of law to compensate for the mental immaturity of persons in the adolescence of life. The infant has been given certain special rights and privileges, and at the same time has had imposed upon him certain disabilities all intended to afford his special protection." 5 Vernier, American Family Laws 3 (1938), cited in Statement of Basis and Purpose of Trade Regulations Rule (Rule 408) 29 Federal Register 8325 at 8357 (1964) and Advertising of Children's Premiums on Television: Proposed Guide 39 Federal Register 25505 at 25507 (1974).

In the framework of modern regulatory law, the courts and our regulatory agencies have recognized various groupings of people as vulnerable and worthy of special protections. The Federal Trade Commission has been no exception. See S.S.S. Co. v. Federal Trade Commission, 416 F.2d 226 (6th Circuit, 1969) where the court recognized rural and urban poor people as vulnerable to certain disceptive marketing practices and see also Doris Savitch 50 F.T.C. 828 (1954) affirmed Savitch v. F.T.C., 218 F.2d 817 (Sec. Cir., 1955).

As early as 1934 the Federal Trade Commission recognized children's vulnerability to deceptive and unfair advertising practices and the need to afford them special protections. See F.T.C. v. R.F. Keppel & Bro., Inc., 291 U.S. 304 (1934), where the U.S. Supreme Court noted the inability of children to make mature judgments.

As the Commission itself has said,

"The Commission and the courts in reviewing its actions have long recognized that children comprise a distinct class of consumers who are in need of special treatment. It is well settled that enterprises dealing with children are held to a particularly stringent standard of conduct under Section 5." Advertising of Children's Premiums on Television: Proposed Guide Supra at 25508.

This long standing recognition of the Commissions of the special needs of children has found form in many of its activities in the enforcement of Section 5 (15 USC 1194(c)). Where an advertisement is directed

toward a particularly vulnerable segment of the population, such as children, the commission will take into account the special susceptibilities of that target audience.

See Ideal Toy, 64 F.T.C. 297, 310 (1964); Topper Corporation, 79 F.T.C. 681 (1971) (Consent Orders). In the case in which the Commission set forth the proposition that it is an unfair practice to make advertising representations without prior adequate substantiation, (Pfizer, Inc. 81 F.T.C., 23 (1972) the Commission cited, at page 65, with approval, the following language from the decision in Heinz W. Kirchner, 63 F.T.C. 1281, 1290 (1963),

"If, however, advertising is aimed at a specially susceptible group of people (e.g. children) its truthfulness must be measured by the impact it will make on them, not others to whom it is primarily directed."

The need to give special protection due to their limited ability to cope with representation in the fashion that adults do, was noted in Wilson Chemical Co., 64 F.T.C. 168, 183 (1964) and in the famous Statement & Purpose of Trade Regulations Rules 408, supra.

Recently, in Hudson Pharmaceutical Corp., CCH. Trade Regulation Reports at ¶21,191, the Commission accepted a consent order prohibiting Hudson from directing advertising for "Spiderman" and other vitamins to children. The Complaint proposed by the staff noted that this practice was unfair and deceptive because children were unqualified by age and experience to

decide whether they used vitamins in general or a special brand of vitamins in particular*. See also the recent cases of ITT Continental Baking Co., Inc. v. F.T.C., 3CCH. Trade Regulation Reports ¶60,758 and Coca-Cola Co., 3CCH Trade Regulation Report ¶20,470 (FTC 1973).

These factors, among others, lead the special consultant, hired by the Federal Trade Commission to evaluate the Special Hearings on Modern Advertising Practices held before the Commission, to assert that the first priority of the F.T.C. in regulating advertising should be to insure that advertisements to children were truthful, complete, intelligible to the child audience and that the approach used was relevant to the needs and understanding of the child audience. Howard & Hulbert, Advertising & the Public Interest: A Staff Report to the Federal Trade Commission (1973), Chapter IX, pp. 10 & 11.

The Federal Trade Commission's recognition of the special vulnerability of the child audience is, of course, consistent with the general legal rule that children lack the capacity to act in their own best interests and to protect themselves with the same agility that competent adults are presumed to possess. The activities of the Federal Trade Commission can be fairly said to protect children from "their lack of

* The Commission also noted children's evening television watching habits and made special provision to protect them.

discretion. . .and the snares of designing persons" in re O'Leary's Estate, 352 Penn. 254, 42 A.2d 624 at 625 (1945). For a comprehensive discussion of the special considerations given children in the common law, before the Commission and in other regulatory settings there is no better compendium of the currently applicable law than that found in the previously mentioned Advertising of Children's Premiums on Television: Proposed Guide, prepared by the staff of the Commission and published in the Federal Register, supra, in July of 1974. See also Reiss "Special Problems in Advertising" 31 Food, Drug, Cosmetic Law Journal 252, (May 1976). COMMENT, "The FCC as Fairy-Godmother: Improving Children's Television" 21 UCLA Law Review 1290 (June 1974); comment, F.T.C. Guide Banning T.V. Ads that Entice children: Soft decision or assertive policy? 4 Capital Univ. Law Rev. 109 (1974) and Thain, Advertising Regulation: The Contemporary FTC Approach, 1 Fordham Urban Law Journal 349 (1973).

In concluding the Staff Statement in Advertising of Children's Premiums on Television: Proposed Guide, the FTC rectified a portion of the language of the 1964 Statement on cigarette advertising. They said:

" . . . (T)hroughout the law in general and under section 5 of the Federal Trade Commission Act in particular, it has been recognized that minors constitute an especially vulnerable

and susceptible class requiring special protection from business practices that would not be unlawful if they only involved adults. Accordingly, a marketing practice, directed in a substantial part toward minors, that interferes substantially and unjustifiably with their freedom of buying choice is an unfair or deceptive act or practice even if it is not especially pernicious as to adults." Advertising of Children's Premiums on Television: Proposed Guide, supra at 25,510.

Our children are our future. Our common law and our regulatory apparatus have both given form to the significant task of providing for children's development. It is a responsibility which requires our continuous diligence.

Acids	Drain cleaners	Nail polish remover
Aerosols	Drugs	Narcotics
Ammonia	Epoxy glue	Oven cleaner
Aspirin	Eye make-up	Paint
Bathroom bowl cleaner	Furniture polish	Paint thinner
Benzene	Garden sprays	Permanent wave
Bubble bath	Golf balls	solution
Carbon tetrachloride	Gun cleaners	Pesticides
Cigarettes	Hair dyes	Petroleum distillates
Cleaning fluids	Herbicides	Pine oil
Clintest tablets	Insecticides	Shaving lotion
Cologne	Iodine	Silver polish
Copper & brass cleaners	Kerosene	Strychnine
	Mace (chemical)	Turpentine
Corn & wart remover	Model cement	Typewriter cleaner
Dishwasher detergents	Nail polish	Vitamins

**Mr. Yuk
could
save your
child's
life.**

CONTAINS GREEN TOMATOES, CHILES,
WATER, TOMATOES, ONIONS, PEPS,
GAR. SALT, SPICES FROM SPICES,
GARLIC AND 1/10 OF 1% SODIUM
BENZOATE AS PRESERVATIVE.

THIS SAUCE IS
HOT
MEDIUM
HOT
MILD

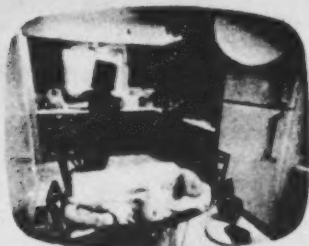
GREEN TACO SAUCE
Delicious on steaks, chops, meat loaf

APPENDIX N

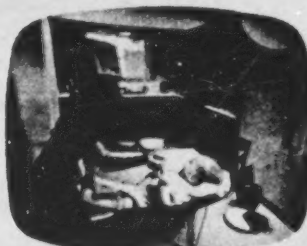
NEW MEXICO NUTRITION IMPROVEMENT PROGRAM - ALBUQUERQUE

"FAT BABY - OVERFEEDING"

OEO GRANT CG68-00B



1. (MUSIC UNDER)



2. ANNCR: (VO) Parents go to great extremes to get their kids to eat a lot.



3. They bribe, urge, cajole, tempt,



4. charm and goad their children to eat



5. until an alarming number are overweight.



6. An overweight baby is not a healthy baby,



7. and may well be tomorrow's overweight adult.



8. If you're uncertain about your child's weight, check with your doctor.



9. If you just want some more information about infant feeding call one of these numbers.

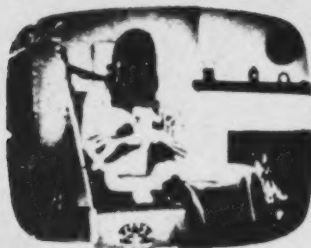


10. A project of the Nutrition Improvement Program.

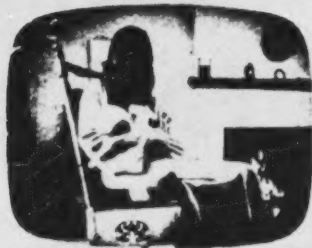
NEW MEXICO NUTRITION IMPROVEMENT PROGRAM - ALBUQUERQUE

"NURSING MOTHERS"

OEO GRANT CG68-008



1. (MUSIC UNDER) WOMAN:
(VO) Now your child is getting
nature's most nearly perfect
food



2 but soon her healthy diet will
be threatened



3. by a crowd of heavily promo-
ted foods



4. that are far from perfect.



5. Nearly everything she'll learn
about eating she'll learn from
you.



6. If you feel you need to learn
more about foods and nutri-
tion,



7. here's how to get free in-
formation.



8. A project of the Nutrition
Improvement Program.

CURRICULUM VITA

Norma Deitch Feshbach
 Professor
 Graduate School of Education
 University of California 90024

Birthdate: September 5, 1926
 Birthplace: New York
 Social Security No.: 134-14-3665
 Husband: Seymour Feshbach

EDUCATION

City College of New York	Psychology	B.S., 1947
City College of New York	Educational Psychology	M.S., 1949
University of Pennsylvania	Psychology	Ph.D., 1956

PROFESSIONAL EXPERIENCE

Professor: Head, Program in Early Childhood Development. Training Director, NIMH Training Grant, Early Childhood Development. Co-Principal Investigator of Fantasy & Empathy Training Project, (NSF), Graduate School of Education, University of California, Los Angeles.

Formerly: Head, Program of Learning and Development; Vice-Chairman, Educational Psychology, Graduate School of Education, University of California, Los Angeles, 1965-present.

Program Director, Center for the Study of Evaluation, Graduate School of Education, University of California, Los Angeles, 1966-69.

Clinical Psychologist II, Lecturer, Neuropsychiatric Institute, UCLA, California Department of Mental Hygiene, Los Angeles, 1965.

Associate Research Psychologist, Psychology Department, University of California, Los Angeles, 1964-65.

Research Associate, Institute of Behavioral Science, University of Colorado, Boulder, Colorado, 1963-64.

Lecturer, Psychology Department, University of California, Berkeley, 1962-63.

Visiting Assistant Professor, Department of Psychology, Stanford University, 1961-62.

Research Associate, Department of Psychology, University of Pennsylvania, 1959-61.

Clinical and Research Consultant, Youth Services, Inc., Philadelphia, Pennsylvania, 1955-61.

Associate and Lecturer, Department of Psychology, University of Pennsylvania, 1956-57.

Psychology Intern, Philadelphia General Hospital, Philadelphia, Pennsylvania, 1955-56.

Research Assistant, Human Resources Research Office, George Washington University, Washington, D. C., 1951-52.

Lecturer, Junior College of Physical Therapy, New Haven, Connecticut, 1948-49.

Clinical Psychologist, Yale University Medical School (Seizure Clinic),
1948.

Teacher, Betsy Ross Nursery School, Yale University, 1947-48.

PROFESSIONAL MEMBERSHIPS

American Association for the Advancement of Science
American Association of University Professors
American Board of Professional Psychologists
American Educational Research Association
American Psychological Association, Fellow
California Association for the Education of Young Children
California Educational Research Association
California Professors of Early Childhood Education
California State Psychological Association
International Society for Research on Aggression
International Society for the Study of Behavioral Development
National Association for the Education of Young Children
National Register of Health Services Providers in Psychology
National Society for the Study of Education
Society for the Psychological Study of Social Issues
Society for Research in Child Development
Western Psychological Association

HONORS

U. S. Public Health Training Fellow, 1953-56
Delta Phi Upsilon, National Honorary of Early Childhood Development
Sigma Xi, National Honorary
Included in the Dictionary of International Biography
Included in International Who's Who of Community Services
Included in Leaders in Education
Included in Who's Who of American Women
Included in Two Thousand Women of Achievement
Included in World Who's Who of Women
Included in Community Leaders and Noteworthy Americans
National Academy of Professional Psychologists, Faculty Member
Woman of the Year, Hadassa, Los Angeles, California, 1973

PROFESSIONAL LICENSES

Certified, Clinical Psychology, Philadelphia, Pennsylvania
Licensed Psychologist (Clinical and Educational), California
Diplomate, School Psychology, American Board of Professional Psychology

EDITORIAL AND REVIEW SERVICES

Editorial Board, Journal of Social Issues
 Consulting Editor, Developmental Psychology
 Consulting Editor, Psychology of Women Quarterly
 Consulting Editor, Review of Educational Research
 Ad Hoc Consultant, American Educational Research Journal
 Ad Hoc Consultant, Child Development
 Ad Hoc Consultant, Merrill-Palmer Quarterly
 Ad Hoc Consultant, Journal of Abnormal Psychology
 Ad Hoc Consultant, National Science Foundation
 Ad Hoc Consultant, NIMH Research Panels
 Ad Hoc Consultant, Allyn & Bacon Publishing Co.
 Ad Hoc Consultant, Saunders Publishing Co.
 Ad Hoc Consultant, Harcourt, Brace and & Janovich Publishing Co.

CONSULTANTSHIPS

West Covina Language Program for Disadvantaged Children, West Covina, California.
 Southwest Regional Laboratory, Los Angeles, California, 1966-67.
 Education for the Handicapped: Evaluation Project, Graduate School of Education, University of California, Los Angeles, 1969-70.
 Institute for the Development of Educational Activities, Los Angeles, 1966-72.
 Advisory Board for Children's Programs, CBS Educational TV, 1972 -
 Davidson Film Company, San Francisco, California, 1973-74, (Educational Films).
 Petersen Film Company, Los Angeles, California, 1973-74, (Educational Films).
 Sutherland Learning Associates, Los Angeles, California, 1973-74.
 Concept Media, Costa Mesa, California, 1974-1975.

*SELECTED COMMITTEES, PROFESSIONAL AND PUBLIC SERVICE

Chairperson, American Psychological Association, Task Force on the Rights of Children and Youth, 1975-
 Psychology Training Review Committee, National Institute of Mental Health, 1974-
 Board of Trustees, Association for the Advancement of Psychology
 Council Member, Society for the Psychological Study of Social Issues, 1975-
 American Board of Professional Psychologists, Western Region, 1974-
 Advisory Committee on Early Childhood Education, Assembly Committee on Education, California Legislature, 1972-73
 Special Statewide Subcommittee of the Academic Council on Positive Affirmative Action, University of California, 1974-
 Trustee, EVAN-G, Committee to End Violence Against the Next Generation
 Member, Research Committee, Academic Senate, UCLA, 1969-72; Chairperson, 1972-73
 Council on Educational Development, UCLA, 1975-

Rights of Children, Society for the Psychological Study of Social Issues
 Chancellor's Committee on Early Childhood, 1966-67
 Chancellor's Committee on Educational Resources, 1972-73
 Member, Advisory Board, National Committee to Abolish Corporal Punishment
 in Schools
 Member, Program Review and Research Advisory Committee for ASUCLA Child
 Care Center, University of California, Los Angeles, 1972-
 Advisory Council of Women's Clinic, Los Angeles, California, 1974
 Member, UCLA Faculty Women's Association

PUBLICATIONS

Effects of anger arousal and similarity upon the attribution of hostility
 to pictorial stimuli (with S. Feshbach and R. Singer). Journal of
Consulting Psychology, 1963, 27 (3), 248-252.

Influence of the stimulus object upon the complementary and supplementary
 projection of fear (with S. Feshbach). Journal of Abnormal and
Social Psychology, 1963, 66 (5), 498-502. Reprinted in G. Lindzey
 and C. Hall (Eds.), Theories of personality: Primary sources and
research. New York: John Wiley and Sons, Inc., 1973, 120-127.
 Also reprinted in P. Mussen and M. R. Rosenzweig (Eds.), Concepts
in Psychology, Lexington, Mass.: D. C. Heath and Co., 1974, 112-120.

Personality and political values: A study of correlates of reactions to
 two accused assassins--Lee Harvey Oswald and Jack Ruby (with S.
 Feshbach). In B. S. Greenberg and E. B. Parker (Eds.), The Kennedy
Assassination and the American Public. Stanford, California:
 Stanford University Press, 1965.

Cognitive development in the preschool child. Lectures for Professional
 Personnel in Child Development Centers, Extension Department,
 University of California, Los Angeles, May 1967, pp. 27-36.

The effects of teachers' reinforcement style upon children's imitation
 and preferences. Proceedings, 75th Annual Convention of the American
 Psychological Association, 1967. Reprinted in W. J. Gnagey (Ed.),
Readings in the psychology of classroom learning. Holt, Rinehart,
 and Winston, 1969.

Nonconformity to experimentally induced group norms of high-status versus
 low-status members. Journal of Personality and Social Psychology.
 1967, 6 (1), 55-63.

Variations in Teachers' Reinforcement Style and Imitative Behavior of
 Children Differing in Personality Characteristics and Social Back-
 ground. Center for the Study of Evaluation, Technical Report #2,
 Graduate School of Education, University of California, Los Angeles,
 1967. ERIC # ED-012-273.

Empathy in six and seven year olds (with K. Roe). Child Development, 1968, 39 (1), 133-145.

Manual of Individual Difference Variables and Measures. Center for the Study of Evaluation, Special Report #2, Graduate School of Education, University of California, Los Angeles, 1968. ERIC # ED-036-877.

A note on the use of the semantic differential in measuring teacher personality and values (with A. Beigel), Educational and Psychological Measurement, 1968, 28, 923-929.

The relationship between empathy and aggression in two age groups (with S. Feshbach). Developmental Psychology, 1969, 1 (2), 102-107.

Sex differences in children's modes of aggressive responses toward outsiders. Merrill-Palmer Quarterly, 1969, 15 (3), 249-258. A condensed version reprinted in Mental Health Digest, 1970, 2 (1), 9-10.

Student teacher preferences for elementary school pupils varying in personality characteristics. Journal of Educational Psychology, 1969, 60 (2), 126-132. Reprinted in M. L. Silberman (Ed.), The experience of schooling. Holt, Rinehart, and Winston, 1971.

Teaching styles in four year-olds (with G. Devor). Child Development, 1969, 40 (1), 183-190. Reprinted in M. B. Miles, W. W. Charters, Jr. (Eds.), Learning in social settings. Allyn & Bacon, 1970, 320-326. ERIC # ED-036-340.

Guide to the Appraisal of Nursery Schools (with M. Frances Klein, J. M. Novotney, and others). Institute for the Development of Educational Activities, Inc., Los Angeles, 1970.

A comparative study of student teacher, teacher corps, and undergraduate student preferences for elementary school pupils (with A. Beigel). Paper read at the California Educational Research Association Meetings, San Francisco, California, February 1970. (Mimeo available)

Children's aggression (with S. Feshbach). Young Children, 1971, 26 (6), 364-377. Reprinted in W. W. Hartup (Ed.), The young child, Vol. 2, Washington, D. C.: NAEYC, 1972. Also reprinted in P. H. Mussen, J. Conger, and J. Kagan (Eds.), Basic and Contemporary Issues in Child Development. New York: Harper & Row, 1975, 231-243.

Sex differences in adolescent reactions toward newcomers (with G. Sones). Developmental Psychology, 1971, 4 (3), 381-386. Reprinted in J. Conger (Ed.), Contemporary Issues in Adolescent Development, New York: Harper & Row, 1975, 185-193.

The influence of sex and socioethnic factors upon imitation of teachers by elementary school children (with S. Portuges). Child Development, 1972, 43 (3), 981-989.

- Cognitive Processes in the Self-Regulation of Children's Aggression: Fantasy and Empathy (with S. Feshbach). Invited paper presented at the Conference on Developmental Aspects of Self-Regulation, La Jolla, California, February 1972. To appear in J. Block and J. Block (Eds.), Developmental Aspects of Self-Regulation.
- Teaching styles in four year-olds and their mothers. In J. Rosenblith, W. Allinsmith, and J. Williams (Eds.), Readings in Child Development, Boston: Allyn & Bacon, 1973, 153-157. ERIC # ED-045-788.
- Imitation of teacher preferences in a field setting (with S. Feshbach). Developmental Psychology, 1972, 7 (1), 84.
- The Effects of Violence in Childhood. Paper read as part of a Symposium on Violence Against Children at the Annual Meeting of the American Psychological Association, Honolulu, Hawaii, September 1972. Journal of Clinical Child Psychology, Fall 1973, 11 (3), 28-31. ERIC # ED-070-526.
- Child Development for Student Teachers: A Multi-Level Educational Model. Teacher Education Laboratory, Graduate School of Education, University of California, Los Angeles, 1972.
- Early schooling in England and Israel (with J. Goodlad and A. Lombard). New York: McGraw-Hill, 1973.
- Alternatives to Corporal Punishment: Implications for Training and Controls (with S. Feshbach). Paper read as part of a Symposium on Alternatives to Corporal Punishment at the Western Psychological Association, Anaheim, California, April 1973. The Journal of Clinical Child Psychology, Fall 1973, 11 (3), 46-48.
- Cross-cultural studies of teaching styles in four year-olds and their mothers. In Anne E. Pick (Ed.), Vol. 7. Minnesota Symposia on Child Psychology. Minneapolis, Minnesota: University of Minnesota Press, 1973, 87-116. Reprinted in P. Mussen, J. Conger, and J. Kagan (Eds.), Basic and Contemporary Issues in Developmental Psychology. New York: Harper & Row, 1975, 286-305.
- The young aggressors (with S. Feshbach). Psychology Today, CRM Publications, April 1973, 90-95. Reprinted in Readings in Developmental Psychology Today, 1975.
- Teaching Styles of Israeli Four Year-Olds and Their Mothers: A Cross-Cultural Comparison. Paper presented at the Annual Meetings of the American Educational Research Association in New Orleans, February 1973. The Hebrew T. Megamont Journal, Jerusalem: The Henrietta Szold Institute, 1974. ERIC # ED-080-178.

Teaching Styles of Mothers of Successful and Problem Readers (with A. Bercovici). Paper presented at the Annual Meetings of the American Educational Research Association in New Orleans, February 1973. ERIC # ED-076-962.

The Relationship of Child-Rearing Factors in Children's Aggression, Empathy and Related Positive and Negative Social Behaviors. Paper read as part of a N.A.T.O. conference on Determinants and Origins of Aggressive Behavior, Monaco, July 1973. In J. DeWit, and W. W. Hartup (Eds.), Determinants and Origins of Aggressive Behavior. The Hague Netherlands: Mouton Publishers, 1975.

New child-rearing patterns: Their hazards and benefits (with S. Feshbach). Los Angeles Times, June 17, 1973. To be reprinted in B. J. Wishart and L. C. Reichman (Eds.), Modern Sociological Issues. New York: Macmillan Co., Part VII, (in preparation).

Early childhood development. UCLA Educator, Spring 1973, 15 (2), 12-14.

Empathy: An Interpersonal Process. Paper read as part of a Symposium on Social Understanding in Children and Adults: Perspectives on Social Cognition at the American Psychological Association, Montreal, August 1973.

Teaching Styles in Young Children: Implications for Peer Tutoring. Paper read as part of a conference on Tutoring and Inter-age Interaction, Madison, Wisconsin, August 1973. In V. Allen (Ed.) Children as tutors: Theory and research on tutoring. Madison, Wisconsin: Wisconsin University Press, 1976.

How Not to Succeed in the Professions Without Really Trying or the Seven Stages of Women. Educational Horizons, Winter 1973-1974, 52 (2), 67-71.

More mannerly than moral. Review of D. Graham, Moral learning and development: Theory and research. Contemporary Psychology, 1974, 19(3), 192-193.

The Effects of Age, Sex, and Modality Upon Social Comprehension and Empathy (with S. Kuchenbecker and G. Pletcher). Paper presented at the Annual Meeting of the Western Psychological Association, San Francisco, April 1974.

A Three Component Model of Empathy (with S. Kuchenbecker). Paper read as part of a Symposium on The Concept of Empathy: Bond Between Cognition and Social Behavior at the American Psychological Association, New Orleans, Louisiana, September 1974. ERIC # ED-101-242.

Empathy in children: Some theoretical and empirical considerations. The Counseling Psychologist, 1975, 5 (2), 25-30.

A Primer for Non-Sexism in Schools. Educational Horizons, Spring 1975, 53 (3), 129-137.

Some Interpersonal Factors Associated with Successful and Problem Readers. Paper presented as part of a symposium of Early Identification of Learning Problems: Issues and Findings at the annual meeting of The Society for Research in Child Development, Denver, Colorado, April 1975. Cassette Tape #91-25C, Hampton, VA: Child Care Information Center, 1976. To be reproduced in ERIC, January, 1976.

Punishment: Parent rites vs. children's rights. In G. P. Koocher (Ed.), Children's rights and the Mental Health Professions. New York: John Wiley (in press--1976).

Studies on empathic behavior in children. In B. A. Maher (Ed.), Vol. 8, Progress in experimental personality research (in press).

Children's aggression (with S. Feshbach). In B. B. Wolman (Ed.), The International Encyclopedia of Neurology, Psychiatry, Psychoanalysis and Psychology (in press).

Children's Rights and Parental Punishment Practices (with S. Feshbach), Paper presented as part of a Symposium on the Eighth Amendment: Cruel and Unusual--Interpretation and Psychological Applications at the American Psychological Association Meetings, Chicago, Illinois, August, 1975.

Maternal Teaching Styles: Issues and Problems in Cross-Cultural Variations. Paper presented as part of Symposium on Ethics and Methodology in Multicultural Research at the American Psychological Association meetings, Chicago, Illinois, August, 1975.

Nondirective and Intrusive Teaching Styles of English Mothers of Young Children (with J. S. Phinney). Paper presented at the Western Psychological Association Meetings, Los Angeles, California, April, 1976.

Expressive Competence: Developing Empathy. Invited address at the First Western Regional Conference, Emeryville, California, April, 1976.

Empathy in Children: A Special Ingredient of Social Development. Invited address, Western Psychological Association Meetings, Los Angeles, California, April, 1976.

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182

CURRICULUM VITA

Seymour Feshbach
Professor of Psychology
University of California
Los Angeles, California 90024

April, 1976
Birthplace: New York
Birthdate: June 21, 1925

EDUCATION

B. S. City College of New York, 1947
M. A. Yale University, 1948
Ph.D. Yale University, 1951

PROFESSIONAL EXPERIENCE

Instructor: City College of New York, Summer of 1948
Instructor: City College of New York, Summer of 1950
Project Director, Attitude Assessment Branch, Office of the Chief
of Information, D/A Washington, D. C., 1951-1952 (had been
recalled to active duty; during this period participated in
and supervised diverse experimental and survey type research
projects)
Assistant Professor: University of Pennsylvania, 1952-1957
Associate Professor: University of Pennsylvania, 1957-1963
Supervisor, Psychology Interns: Philadelphia General Hospital,
1952-1956
Director and Co-Director, Psychology Clinic: University of
Pennsylvania, 1958-1961
Guest, Roscoe E. Jackson Memorial Laboratory (Summer of 1960)
Visiting Associate Professor: University of California, Berkeley,
1961-1962
Special USPHS Fellow, 1962-1963 at Stanford University
Professor: University of Colorado, 1963-1964
Professor: University of California, Los Angeles, 1964-
Director: Fernald School University of California, Los Angeles,
1964-1973

PROFESSIONAL ACTIVITIES AND MEMBERSHIPS

Invited Participant, Conference on Fantasy and Projection, Yellow
Springs, Ohio, 1956
Participant, Behavioral Science Conference (8 weeks), New Mexico,
Summer of 1958
Participant, Conference on Aggression, Brain Research Institute, 1966
Participant, Ross Conference on Pediatric Research on Learning
Disorders in Children, December 1969, La Quinta, California

Consultant to the Human Resources Research Office, 1952-1954
 Consultant to the Veterans Administration, 1954-present
 Consultant to National Health Council, 1959-1960
 Consultant to various clinical facilities in Pennsylvania, New Jersey and California (State and private mental hospitals, youth agencies)
 Consultant, Davidson Films, San Francisco, on the Development of Aggression
 Consultant, Columbia Broadcasting Systems, Educational Television, 1972

Member, Mental Health Study, NIMH, for the term beginning July 1, 1964 and ending June 30, 1968

Member, NIMH Psychology Training Grant Committee, 1968-1971

Chairman, NIMH Psychology Training Grant Committee, 1971-1972

Consulting Editor: Journal of Abnormal Psychology

Consulting Editor: Journal of Personality and Social Psychology
 (Declined invitation to be an Editor)

Ad Hoc Consultant to Psychological Review, American Journal of Psychology, Science, Journal of Personality, Human Relations, etc.

Ad Hoc Consultant to NSF and NIMH on grant proposals

Member, EVAL-G Committee to End Violence Against the Next Generation

Frequent Interviews: Television, radio, magazine services

Addresses to Parent and School groups in the community

California, Western, and American Psychological Associations

Fellow APA: Divisions of Clinical and Personality - Social
 A.A.A.S.

Society for the Study of Social Issues

Society for Research in Child Development

International Society for Applied Psychology

International Society for the Study of Aggression (ISRA)

International Society for Study of Behavioral Development

Program Chairperson, ISRA Conference, Paris, France, July 1976

Co-Director, conference on changing aggressive behavior, Warsaw, Poland, July 1976

AWARDS AND HONORS

Ward Medal in Psychology, CCNY, 1947

Phi Beta Kappa

Junior Sterling Fellow: Yale, 1948-1950

U. S. Public Health Research Fellow, 1950-1951

Special USPHS Fellow (1962-1963 at Stanford University)

Included in Who's Who in the West; Who's Who in American Men of Science,
 in Social Science, Who's Who in World Jewry, Dictionary of International
 Biography, etc.

Townsend Harris Medal, Distinguished Alumnus Award, CCNY, 1972

President, Western Psychological Association, 1976-1977

RECENT COLLOQUIA, INVITED ADDRESSES (1971-1976)

Colloquia: City University of New York, Cornell, Michigan State, North Carolina, Reiss-Davis, San Francisco Medical Center, Kaiser Foundation (Los Angeles), San Diego State, Neuro-Psychiatric Institute (UCLA), University of Illinois (Chicago Circle campus), University of Michigan, Wayne County Head Start

Invited Participant: NICHD Workshop in the "Development of Motivation in Childhood," Maryland; APA, 1972 meetings, Symposium on "Corporal Punishment;" WPA, 1973 meetings (see bibliography); APA, 1973 meetings, symposium on "Human Aggression;" APA, 1973 meetings, (see bibliography); 1974 meeting on violence in television and criminality, Florence, Italy SRCD meetings, Emeryville, California, 1976; WPA meetings, Los Angeles, 1976.

Invited Addresses:

WPA, 1971, 1975

Conference, Marianne Frostig Center of Educational Therapy, Los Angeles, 1971

North Carolina Psychological Association, 1971

NIMH Conference on Developmental Aspects of Self-Regulation, 1972, La Jolla (see bibliography)

4th Western Symposium on Learning, Bellingham, Washington, 1972

Southern California Society for the Study of Sex (see bibliography)

NATO sponsored conference on Determinants and Origins of Aggressive Behavior, Monte Carlo, Monaco, 1973 (see bibliography)

University of the Saar, Saarbrücken, Germany, 1973 (see bibliography)

International Society for Research on Aggression, Toronto, Canada, 1974

Clemson University symposium on Perspectives on American Violence and Aggression, South Carolina, 1975 (see bibliography)

Kaiser Permanente symposium on Aggression in Childhood, Los Angeles, 1975 (see bibliography)

Society for Research on Child Development, Denver, Colorado, 1975 (see bibliography)

PUBLICATIONS

- Janis, I. L., & Feshbach, S. Effects of fear arousing communications. Journal of Abnormal and Social Psychology, 1953, 48, 78-92. (This article is reprinted in D. Katz (Ed.) Public opinion and propaganda. New York: Dryden Press, 1954.)
- Janis, I. L., & Feshbach, S. Personality differences associated with responsiveness to fear-arousing communications. Journal of Personality, 1954, 23, 154-166.
- Feshbach, S. The drive reducing function of fantasy behavior. Journal of Abnormal and Social Psychology, 1955, 50, 3-11. (This article is reprinted in J. W. Atkinson (Ed.), Motives in fantasy, action and society. New Jersey: D. Van Nostrand Company, 1958.); to be reprinted in Aggression und frustration als psychologisches problem bd. II.
- Feshbach, S. The catharsis hypothesis and some consequences of interaction with aggressive and neutral play objects. Journal of Personality, 1956, 24, 449-462.
- Feshbach, S., & Singer, R. The effects of personal and shared threats upon social prejudice. Journal of Abnormal and Social Psychology, 1957, 54, 411-416.
- Feshbach, S., & Singer, R. The effects of fear arousal and suppression of fear upon social perception. Journal of Abnormal and Social Psychology, 1957, 55, 283-288.
- Feshbach, S. & Loeb, A. A further experimental study of a response-interference versus a drive-facilitation theory of the effect of anxiety upon learning. Journal of Personality, 1959, 27, 497-506.
- Feshbach, S., & Singer, R. Some relationships between manifest anxiety, authoritarian tendencies, and modes of reaction to frustration. Journal of Abnormal and Social Psychology, 1959, 404-408.
- Feshbach, S. Fear in health education motivation. Annals of the New York Academy of Medicine (Paper delivered to New York Public Health Association, 1959).
- Feshbach, S. The influence of drive arousal and conflict on fantasy behavior. In J. Kagan & G. S. Lesser (Eds.), Contemporary issues in thematic apperceptive methods. Springfield, Ill.: Charles C. Thomas, 1961, 119-140.
- Feshbach, S. The stimulating versus cathartic effects of a vicarious aggressive activity. Journal of Abnormal and Social Psychology, 1961, 63, 381-385. (This article is reprinted in D. Rogers (Ed.), Book of readings. Brooks-Cole Publishing Co., 1968.)

- Pepitone, A., & Feshbach, S. A theoretical analysis of conflict. In N. F. Washburne (Ed.), Decisions, values and groups. New York: Pergamon Press, Inc., 1962.
- Feshbach, S. The consequences of fear arousal in Public Health Education. In G. S. Nielson (Ed.), Clinical psychology (Vol. IV; Proceedings of XIV International Congress of Applied Psychology). Munksgaard, Copenhagen, 1962.
- Feshbach, S., Beck, A. T., & Legg, D. The clinical utility of digit symbol performance in the diagnosis of depression. Journal of Consulting Psychology, 1962, 26, 263-268.
- Feshbach, S., & Singer, R. Effects of anxiety arousal in psychotics and normals upon the perception of anxiety in others. Journal of Personality, 1962, 30, 574-587.
- Feshbach, S. Children's Seashore House picture story test: Picture set and scoring manual. Atlantic City, N. J., 1962.
- Feshbach, S., & Feshbach, N. The influence of the stimulus object upon the complementary and supplementary projection of fear. Journal of Abnormal and Social Psychology, 1963, 66, 498-502. (Reprinted in G. Lindzey, C. Hall, and M. Manosevitz (Eds.), Theories of personality: Primary sources and research. New York: John Wiley and Sons, Inc., 1973, 120-127.
- Feshbach, S. The effects of aggressive content in television programs upon the aggressive behavior of the audience. In L. Arons & M. A. May (Eds.), Television and human behavior. New York: Appleton-Century Crofts, 1963, 83-97.
- Feshbach, S. The effects of emotional restraint upon the projection of positive affect. Journal of Personality, 1963, 31, 472-481.
- Kaufmann, H., & Feshbach, S. Displaced aggression and its modification through exposure to anti-aggressive communication. Journal of Abnormal and Social Psychology, 1963, 67, 79-83.
- Kaufmann, H., & Feshbach, S. The influence of anti-aggressive communications upon the response to provocation. Journal of Personality, 1963, 31, 428-444.
- Feshbach, S., Singer, R., & Feshbach, N. Effects of anger arousal and similarity upon the attribution of hostility to pictorial stimuli. Journal of Consulting Psychology, 1963, 27, 248-252.
- Feshbach, S., Moed, G., Wight, B., & Sandry, M. A picture story test for use in physical disability. Perceptual and Motor Skills, 1963, 17, 483-497.

- Feshbach, S. The function of aggression and the regulation of aggressive drive. Psychological Review, 1964, 71, 257-272. (To be reprinted in H. Kornadt (Ed.), Aggression und frustration als psychologisches problem, Ed. 1, Darmstadt: Wissenschaftliche Buchgesellschaft).
- Loeb, A., Feshbach, S., Beck, A. T., & Wolf, A. Some effects of reward upon the social perception and motivation of psychiatric patients varying in depression. Journal of Abnormal and Social Psychology, 1964, 68, 609-616.
- Feshbach, N., & Feshbach, S. Personality and political values: A study of reactions to two accused assassins. In B. S. Greenberg & E. B. Parker (Eds.), The Kennedy assassination and the American public: Social communication in crisis. Stanford University Press, 1965, 289-304.
- Feshbach, S., Stiles, W., & Bitter, E. The reinforcing effect of witnessing aggression. Journal of Experimental Research in Personality, 1967, 2, 133-139.
- Jessor, R., & Feshbach, S. (Eds.) Cognition, personality and clinical psychology. San Francisco: Jossey-Bass, 1967.
- Feshbach, S. Comments on "The concepts of development and learning in child behavior" (Lewis P. Lipsitt). In D. B. Lindsley and A. A. Lumsdaine (Eds.), Brain function and learning. Los Angeles, University of California Press, 1967, 237-240.
- Feshbach, S. Effects of exposure to aggressive content in television upon aggression in boys. (Proceedings of the XVI International Congress of Applied Psychology, Copenhagen, 1968), 669-672.
- Feshbach, S., & Feshbach, N. The relationship between empathy and aggression in two age groups. Developmental Psychology, 1969, 1, 102-107. (To be reprinted in H. Kornadt (Ed.), Aggression und frustration als psychologisches problem. Darmstadt: Wissenschaftliche Buchgesellschaft).
- Feshbach, S. A training, demonstration, and research program for the remediation of learning disorders in culturally disadvantaged youth. Final Report. Los Angeles: Fernald School, UCLA, August 1969, Project M7-200, State of California, Department of Education, Division of Compensatory Education. (Reported on in Education Daily, October 4, 1971, 4, 4-5).
- Feshbach, S., & Adelman, H. A demonstration and research project focusing on personalizing classroom instruction and teacher education in disadvantaged area schools. Yearly Report. Los Angeles: Fernald School, UCLA, August 1970, Project M9-20, California State Department of Education, Division of Compensatory Education.
- Feshbach, S. Aggression; Chapter in the Mussen (Ed.) revision of Carmichael's manual of child psychology, Vol. II. New York: John Wiley & Sons, 1970, 159-259.

- Feshbach, S., & Singer, R. Television and aggression. San Francisco: Jossey-Bass, Inc., 1970.
- Senf, G. M., & Feshbach, S. The development of bisensory memory in culturally deprived, dyslexic, and normal readers. Journal of Educational Psychology, 1970, 61, 461-470.
- Adelman, H., & Feshbach, S. Predicting reading failure: beyond the readiness model. Exceptional Children, 1971, 37, 349-354.
- Feshbach, S., & Adelman, H. An experimental program of personalized classroom instruction in disadvantaged area schools. Psychology in the Schools, 1971, VIII, 114-120.
- Feshbach, S. The dynamics and morality of violence and aggression: Some psychological considerations. American Psychologist, 1971, 26, 281-292. (Reprinted in I. G. Sarason (Ed.), Readings in maladaptive behavior: current issues and trends. New York: Appleton-Century-Crofts, 1972; in H. C. Lindgren (Ed.), Contemporary research in social psychology. New York: John Wiley & Sons, 1973, 459-478.)
- Feshbach, N., & Feshbach, S. Children's aggression. Young children, 1971, XXVI, 364-377. (Reprinted in W. S. Hartup (Ed.), The young child. Washington, D. C.: National Association for the Education of Young Children, 1972, 284-302; and in P. Mussen, J. Conger & J. Kagan (Eds.), Basic and Contemporary Issues in Developmental Psychology. New York: Harper & Row, 1975.
- Adelman, H., & Feshbach, S. An experimental program on in-service teacher education in disadvantaged area schools. Education, 1971, 92, 101-109.
- Malamuth, N., & Feshbach, S. Risky shift in a naturalistic setting. Journal of Personality, 1972, 40, 38-49.
- Feshbach, N., & Feshbach, S. Imitation of teacher preferences in a field setting. Developmental Psychology, 1972, 7, pg. 84.
- Feshbach, S. Reality and fantasy in filmed violence. In J. P. Murray, E. A. Rubinstein, & G. A. Comstock (Eds.), Television and social behavior, Vol. II: Television and social learning. Washington, D. C.: Government Printing Office, 1972.
- Feshbach, S., & Singer, R. D. Television and aggression: A reply to Liebert, Sobol and Davidson and Sobol review and response. In G. A. Comstock, E. A. Rubinstein, and J. P. Murray (Eds.), Television and social behavior, Vol. V: Television's effects: further explorations. Washington, D. C. Government Printing Office, 1972.
- Feshbach, S. Model programs: The Fernald School remediation of learning disorders program. DHEW Publication, United States Government Printing Office, 1972.

- Feshbach, S. Fantasy and regulation of aggression. In M. E. Meyer (Ed.), 4th Western Symposium on Learning: Social Learning, 1973.
- Feshbach, S. Personality (chapters on Personality and Measurement; Theories of personality; Motivation and psychopathology). In P. Mussen and M. Rosenzweig (Eds.), Psychology: an introduction. Massachusetts: D. C. Heath & Co., 1973, 149-270.
- Feshbach, S., & Feshbach, N. The young aggressors. Psychology Today, CRI Publications, April 1973, 90-95.
- Feshbach, S., & Singer, R. D. Television and aggression: An experimental field study. In L. S. Wrightsman and J. C. Erigham (Eds.), Contemporary issues in social psychology. Monterey: Brooks Publishing Co., 1973, 208-211.
- Feshbach, S., & Feshbach, N. Cognitive processes in the self-regulation of children's aggression: fantasy and empathy. Invited paper presented at the Conference on Developmental Aspects of Self-Regulation, La Jolla, California, February, 1972. In J. Block and J. Block (Eds.), Developmental aspects of self-regulation. In press.
- Feshbach, S. Dynamics of aggression: Some institutionalized forms of violence. Paper presented as part of a Symposium on Violence Against Children at the meeting of the American Psychological Association, Honolulu, Hawaii, September 1972.
- Feshbach, S., & Adelman, H. Early identification of children with high risk of reading failure. Paper presented at the meeting of the American Educational Research Association, New Orleans, February 1973. In Journal of Learning Disabilities, December 1974, 7, 639-644.
- Friar, J., & Feshbach, S. Factors of predicted learning disorders and their interaction with attentional and perceptual training procedures. Paper presented at the meeting of the American Educational Research Association, New Orleans, February 1973.
- Feshbach, S., & Feshbach, N. Alternatives to corporal punishment: implications for training and controls. Paper presented as part of a Symposium on Alternatives to Corporal Punishment at the meeting of the Western Psychological Association, Anaheim, California, April 1973. Journal of Clinical Child Psychology, Fall 1973, 3, 46-48.
- Jaffe, Y., Malamuth, N., Feingold, J., & Feshbach, S. Sexual arousal and behavioral aggression. Paper presented at the meeting of the Western Psychological Association, Anaheim, California, April 1973. Journal of Personality and Social Psychology, 30, (6).

- Feshbach, S. Sex and aggression: some theoretical issues and empirical research. Invited address presented at the meeting of the Society for the Scientific Study of Sex, Inc., Southern California Regional Chapter, Las Vegas, Nevada, June 1973.
- Feshbach, N., & Feshbach, S. The child and changing family patterns. Los Angeles Times, June 24, 1973. Reprinted in Modern Sociological Issues, Macmillan Publishing Co., 1975.
- Feshbach, S. The development and regulation of aggression: some research gaps and a proposed cognitive approach. Invited address presented at the N.A.T.O. international conference on Determinants and Origins of Aggressive Behavior, Monte Carlo, Monaco, July 1973. In W. W. Hartup and J. de Wit (Eds.) Determinants and origins of aggressive behavior, Netherlands: Mouton & Co., 1974, 167-191.
- Feshbach, S. Problems and issues in the control of aggression. Paper presented at Saarbruchen, Germany, 1973; H. Kornadt (Ed.) Aggression und frustration als psychologisches problem bd. II. Darmstadt, Germany: Wissenschaftliche Buchgesellschaft, in press.
- Feshbach, S. Some issues in the control of aggression. Paper presented as part of a symposium on aggression at the meeting of the American Psychological Association, Montreal, Canada, August 1973.
- Feshbach, S., & Adelman, H. Early intervention efforts to alleviate mental health and educational problems: some critical questions. Submitted for publication.
- Adelman, H., & Feshbach, S. Early identification of educational and mental health problems. Paper presented at the meeting of the American Psychological Association, Montreal, Canada, August 1973.
- Malamuth, N., Jaffe, Y., & Feshbach, S. Effects of sexual arousal vs. general excitement on behavioral aggression. Submitted for publication.
- Feshbach, S., & Bentzen, C. (Film) The tutors of Fernald. Presented at the meetings of the Western Psychological Association and American Psychological Association, 1973.
- Feshbach, S. Proceedings of the meeting on: Research methods and results concerning the relationship between violence in television and criminality. Conference held in Florence, Italy, September 1974. Published by Edizioni Rai Radiotelevisione Italiana, 1975, 38-39; 116-121; 193-195.
- Feshbach, S. & Adelman, H. The remediation of learning problems among the disadvantaged. Journal of Educational Psychology, 1974, 66, 16-28.
- Feshbach, S., Drapkin, R. and Malamuth, N. The effects of aggression inhibition and aggression facilitation upon sexual responsiveness. Paper presented at the meeting of the International Society for Research on Aggression, Toronto, Canada, August 1974; in Sociological Abstracts, August 1974, 43. (Extended version submitted for publication.)

- Adelman, H. & Feshbach, S. Early identification of children with learning problems: Some methodological and ethical concerns. Paper presented as part of a symposium at the Society for Research on Child Development meeting in Denver, Colorado, April 1975.
- Feshbach, H.D. & Feshbach, S. Punishment: Parents' rites vs. children's rights. In, Gary P. Koocher (Ed.) Children's rights and the mental health profession, New York: John Wiley & Son, 1976, In press.
- Feshbach, S. Mass media effects: some issues in the regulation of aggression. Paper presented at Clemson University symposium, February, 1975. Perspectives on American violence and aggression, South Carolina: Clemson University Press, In press.
- Feshbach, S. The origins and management of aggression. Paper presented at the Kaiser Permanente symposium entitled "Aggression in Childhood" in Los Angeles, May 1975.
- Feshbach, S. Children's rights and parental punishment practices. Paper presented at American Psychological Association meeting, August 1975.
- Feshbach, S., Adelman, H. & Fuller, W. The prediction of reading and related problems. Paper presented as part of a symposium at the Society for Research on Child Development meeting in Denver, Colorado, April 1975. (Extended version submitted to Journal of Educational Psychology.)
- Yinon, Y., Jaffe, Y. & Feshbach, S. Risky aggression in individuals and groups. Journal of Personality and Social Psychology, May 1975, 31, (5), 808-815.
- Malamuth, N. & Feshbach, S. & Jaffe, Y. Sexual arousal and aggression: a review. Peplau and Hammen (Eds.) To be published in Journal of Social Issues volume on Human Sexuality.
- Feshbach, S. Role of fantasy in the response to television. To be published in Singer & Kaplan (Eds.), Journal of Social Issues volume on Television and Children.
- Feshbach, S. The use of behavior modification procedures: a comment on Stolz, et al. American Psychologist, July 1976, 538-541.
- Feshbach, S. & Feshbach, M. Children's aggression. International Encyclopedia of Neurology, Psychiatry, Psychoanalysis and Psychology, 1976, In press.
- Feshbach S. & Fraczek, A. (Eds.) Changing aggression: biological and psychological perspectives. (In process: English edition to be published by Jossey-Bass, Inc., San Francisco.

Feshbach, N. & Feshbach, S. (Eds.) The changing status of childhood: roles, rights and responsibilities. Journal of Social Issues volume, in process.

Luick, A.H. & Feshbach, S. Visual sequential memory deficit in children predicted to have reading problems. Submitted to Journal of Learning Disabilities.

Murray, J. & Feshbach, S. The vicarious effects of behavioral aggression on fantasy aggression in children. Submitted to Journal of Personality and Social Psychology.

BOOK REVIEWS

Feshbach, S. Review of M.R. Jones (Ed.), Nebraska symposium on motivation. American Journal of Psychology, 1957, 70, 147-149.

Feshbach, S. Review of Social and cultural minorities: An analysis of prejudice and discrimination. (Rev. ed.) Contemporary Psychology, 1959, 186-187.

Feshbach, S. Review of R.J. Rousseev, Discord in Brown and White. Personnel and Guidance Journal, 1962, p.835.

Feshbach, S. Review of A.H. Buss, The psychology of aggression. Contemporary Psychology, 1962, 268-269.

Feshbach, S. Review of P.H. Knapp (Ed.), Expressions of the emotions in man. Contemporary Psychology, 1964, 468-470.

Feshbach, S. Review of S. Tomkins, Affect, imagery, consciousness. Vol. II: The negative affects. Contemporary Psychology, 1965, 322-323.

Feshbach, S. Review of J.L. Singer (Ed.), The control of aggression and violence. Contemporary Psychology, 1973, 18, 355-357.

Feshbach, S. Review of R.N. Johnson, Aggression in man and animals. American Scientist.

Feshbach, S. Review of R.L. Jones and D.L. MacMillan (Eds.), Special Education in Transition. Contemporary Psychology, 1975, 20, 949-950.

Feshbach, S. Review of Milgram, S. & Shotland, R.L., Television and Anti-Social Behavior, Academic Press, New York & London, Contemporary Psychology, March, 1975, 20, (3), 212.

OTHER MEDIA

Feshbach, S. Compensatory education (Cassette), Del Mar: Psychology Today, 1974.

Feshbach, S. Prediction of reading and related academic problems. (Cassette), Hampton: Child Care Information Center, 1975.

Feshbach, S. Children's aggression. (Educational film) San Francisco: Davidson Films, 1974.

CURRENT PRINCIPAL RESEARCH PROJECT

(With N. Feshbach) Effects of fantasy and empathy training on aggression. Field project in public schools funded for three years (1976-1979) by the National Science Foundation.

The Design of a Graphic to Convey
Nutritional Information to Children:
Pilot Studies

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Report Number I

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The Design of a Graphic to Convey
Nutritional Information to Children:
Pilot Studies

Study

The field testing phase of the Nutritional Computer Indicator, a device designed and developed to convey nutritional information to young children, (Report Number 2) was preceded by a series of pilot studies. The first in the series was especially exploratory in nature. In this first study, three different sets of graphics, each employing three slides were developed. The first graphic set utilized a stylized figure of a child, the second a stylized sparsman and the third a placesetting with plate, knife and fork and spoon. Each slide, within a set, contained two figures. The first termed the Good Food Graphic, served as the standard comparison graphic while the second was the Advertized Food Graphic.

Within each figure were placed large colored letters which represented the nutritional content of a particular food. These letters were P for protein, B, A, & C, for the B.A. and C Vitamins, K for Calcium & I for Iron. The number of occurrences of each of these letters was determined by the percentage of the Minimum Daily Requirement contained in an average serving of the food each graphic represented. The Good Food figure was based on Raisin Bran, and the letters in it were constant across graphics. The Advertised Food graphic changed as a function of the food it represented. The three foods illustrated for comparison were Hershey Bar with Almonds, Peanut Butter, and Del Monte Golden Corn. There was a slide representing each of these three foods for each of the three graphics, making a total of nine slides. The letters in different graphics for each food remained constant, but the spatial arrangement of those letters varied as the graphic changed.

Sample

The sample included in the initial test phase consisted of 18 children, ranging in age from 4 to 12 years.

Procedure

Children were briefly introduced to the task and queried about the nature of the slides.

Results:

The test experience yielded the following findings and conclusions:

1. Less than 1/3 of the children understood the relationship between the graphic and the nutritional information it conveyed.
2. The lack of comprehension was especially characteristic for children under the age of eight.
3. The use of letter density as the index of the amount of nutrients did not appear to be an optimal index, inasmuch as many children appeared confused about the meaning of the individual letters and manifested difficulty in separating out the different letters.
4. The Spaceman was most preferred by the younger children and the Place-setting most preferred by the older children.
5. The usefulness of a Standard of Comparison was questioned (because of the confusion it apparently generated).
6. One of the children named our graphic by calling our spaceman a NUTRITION COMPUTER.

Pilot Study II

On the basis of the findings yielded by the initial study, the following procedural changes were indicated: (1) to pursue the NUTRITION COMPUTER as the graphic, (2) to eliminate the standard comparison figure.

Purposes

The purposes of this phase of testing were manifold:

1. To develop an effective procedure for presenting the information
2. To develop a system of appropriate scoring of the children's responses.
3. To evaluate, in a general way, whether children were comprehending and learning the presented information.

Procedure

Sample

Six children between the ages of 5 and 12 were interviewed.

Materials

The graphic used in this study consisted of the NUTRITION COMPUTER, a stylized robot figure with nutritional information displayed in the chest area. This information consisted of a number and the letters Cal. to represent caloric content, and (beneath this, three additional) bar graphs to represent the protein, vitamin and mineral content of each food. Slides were prepared for three foods -- Hot Dog, Hershey Bar, and Life Cereal. A three slide version and a one slide version were tested. The three slide version consisted of Slide 1: a picture of the package of the food blank NUTRITION COMPUTER. Slide 2: the NUTRITION COMPUTER placing something in his mouth, with his chest area showing circuits and his lights blinking. The food was now displayed as one serving of food. Slide 3: the NUTRITION COMPUTER showing the nutritional analysis of one serving of the food on his chest area. The one slide version consisted of the NUTRITION COMPUTER beside a picture of one serving of the food. The robot in the one slide version was seen placing something in his mouth, and simultaneously on his chest was displayed the nutritional analysis of one serving of the food. The total elapsed time for each version was five seconds per food. Simultaneous with the slide presentation, the voice of an experimenter said "See how much Protein, Vitamins and Minerals there are in a _____ calorie serving of this food.? (The appropriate amount of calorie being stated for each food.)

Materials: consisted of pictures of the NUTRITION COMPUTER with the places for the nutritional content indicated but not filled in with specific amounts of nutrients. An empty plastic container 6X6X6 inches square served to contain imaginary good and bad foods.

Procedures

The procedure for conducting the interviews was as follows:
The experimenter (E) engaged the child in conversation until rapport was established and then asked the following questions:

- E. "Do you know what a commercial is on TV? (E establishes that the child really knows about commercials, defining them if necessary)
- E. "Pretend that it's Saturday morning and you're watching TV and a commercial comes on about (food name). At the end of it, this picture comes on." (Show one set of graphics, for one food).
- E. "What do you think that picture/pictures (matching the one or three slide version) was trying to tell you?" (Probes, if necessary, -- What do you think it was trying to tell you? What did you see?)
- E. "How many calories does (food name) have? Do you think that is a lot, a little, or a middle amount of calories?"
- E. Then gives the child a picture of the blank graphic and three pens.
- E. "Here is a picture of the picture, and some pens. Color in this bar to show how much protein (food name) has." (Probe: Make it look like it did in the slide.)

Repeat this procedure for vitamins and minerals.

- E. "Is (food name) good for you? Why? How can you tell from the picture?"
- E. That was really helpful. Now pretend it's another Saturday, and you saw another commercial on TV, this time about (next food name). At the end of it, this picture came on."

Repeat procedure with second and third foods.

A generalization task(s) was incorporated into the design of the study to provide more information re type of learning that was occurring. Were children merely repeating information or were they able to apply what they had learned to a new situation?

Generalization task

(In this pilot study, imaginary foods in plastic bottles were used as generalization items. In subsequent pilots, and in the field testing phase pictures of the NUTRITION COMPUTER with designated amounts of calories, proteins, vitamins and minerals were used.)

- E. "In this container, pretend that I have a food that's very good for you -- just as good as it can possibly be for you. If the picture came on after a commercial about this food, what would it have on it? Show me by filling in this picture."
- E. "Now in this can, pretend that I have a food that is not so good for you -- really just not good for you. What would the picture look like then? Show me."

The Experimenter then thanked the child, and answered any question she/he had about the procedure or the graphic.

General Findings and Recommendations

Based on the responses of the children, several recommendations were made:

1. The procedure should be changed to include an orientation - training session. Since only the 11 and 12 year olds gave evidence of understanding the graphic using the present procedure, it was felt that a short orientation-training session preceding the testing should be introduced. This modification was justified on the basis that if the graphic such as this is adopted for use on television, it would be likely that it would be seen

many times; that it could well be accompanied by a program of Public Service Announcements, school curricula guides, and peer teaching processes which would serve to teach the children how to interpret the graphic.

2. A new response measure should be developed. The procedure of coloring in a blank graphic proved to be a distracting task -- the children especially the younger ones, became so absorbed in the act of coloring that they lost sight of correctly reproducing the slide.

3. The graphic, NUTRITION COMPUTER, should be retained, but the caloric figure should be enlarged. The children reacted positively to the graphic. However, they did not attend to the number of calories. It was thought that enlarging the number might make it more noticeable and hence enhance the child's attending and remembering it.

4. The one slide version should be used, rather than the three slide version. The three slide version results in the nutritional information being presented for less than two seconds because of the time utilized by the first two slides, which do not contain any nutritional information. The one slide version affords a full five seconds of exposure. None of the children tested could reproduce the nutritional information accurately using the three slide version. Although our sample was too small to test this observation systematically, it was our impression that the children needed a longer exposure time in order for them to grasp the information and reproduce it. For example, one child verbalized the need for more time; "I didn't see the protein, vitamins or minerals because it was on too short."

Pilot III

Purposes

The purposes of this pilot were to:

1. Evaluate the modifications which resulted from previous pilot work,
2. Recommend additional modifications.

Sample

The sample consisted of two boys and two girls at each of ages four and five, making a total of 8 children who were interviewed. All children were enrolled in a private nursery school.

Materials:

The one slide version of the NUTRITION COMPUTER, with the caloric figure enlarged, was used. Materials consisted of (1) a wooden model of the NUTRITION COMPUTER, with movable bars to adjust the contents of the bar graphs for protein, vitamins and minerals, and a blank space for the number of calories, and (2) a set of 6 generalization pictures of good, bad and ambiguous foods (prepared by varying the amount of proteins, minerals, and vitamins).

Procedure:

Trial I - Children were given a short orientation lesson in the basics of nutrition and the interpretation of the NUTRITION COMPUTER graphic. They were shown the slides and were given an opportunity to practice reproducing the slide version of the NUTRITION COMPUTER with the model. They evaluated the generalization pictures, receiving feedback on their performance.

Trial II - The children were then presented the slides again. They were then tested on their ability to remember the information and understand the

graphic. The slides were shown for 5 seconds each, and the child adjusted the model to match his/her memory of the figures shown. Then the child evaluated the generalization pictures, justifying their responses. (See attachment for complete procedure).

General Findings and Recommendations:

1. None of the children appeared to utilize the calorie information.
2. All of the five year olds but none of the four year olds could sort the generalization pictures on the basis of the amount of protein, vitamin and minerals displayed.
3. The model seemed to be satisfactory, as did the presenting procedures used.

It was recommended that the procedures be retained, but the materials expanded to include a graphic display of the caloric content for comparison with the numeric display. This recommendation was the final change to be incorporated in the procedures before the actual field testing, the results of which are presented in Report Number 2.

Orientation

Pretend that you were watching TV and a commercial came on about some food, and it talked about how good that food was for you. Then at the end of the commercial this little figure came on the screen. This is the NUTRITION COMPUTER. He tells you about the food you saw in the commercial. He tells you how many calories it has in a serving, how much protein it has and how many vitamins and minerals it has in it. The calories are shown by this number at the top. Your body needs calories for energy, but too many calories will make you fat.

This P stands for protein. You need protein to help your body grow. This whole (points to wooden model) box after the P shows how much protein you need each day. The stripes show how much protein is in one serving of the food you saw in the commercial. If the box were half full of stripes, (demonstrate) then you could get half of the protein you need for a whole day by eating just one serving of that food. That food would be a good source of protein, and very good for you. If there were just one or a few stripes, then the food would not have very much protein in it, and

you would have to eat an awful lot of it to get the protein you need.

This number tells you the same thing as the stripes, but in percentage form.

100% would mean that the food had all of the protein you need for a day

(called the minimum daily requirement) The box would be completely full of stripes.

If the food had half the daily requirement in one serving, then the number

would be 50% and the box would be half full of stripes.

This V stands for vitamins. You need vitamins to keep you healthy and to grow.

The box shows how many vitamins you need each day, and the number of stripes

shows you how many vitamins are in one serving of the food that you saw in the

commercial. A lot of stripes would mean that the food has a lot of vitamins.

A few stripes would mean that the food was not a good source of vitamins. The

number shows the percentage of the minimum daily requirement of vitamins in

one serving of the food.

This M stands for minerals, which you also need to stay healthy. It works the same

way as the protein and the vitamins. The box shows a full day's need for minerals,

and the number of stripes and the percentage number show you how many minerals are in the food that the commercial was about.

So that's how the Nutrition Computer works. He comes on the TV after a commercial about food, and he tells you how many calories (point) protein, vitamins and minerals there are in one serving of the food that the commercial was about.

Now let's look at the Nutrition Computer again. You remember that it shows the number of calories in one serving of a food here (point). Calories give you energy, but too many calories make you fat. Your body needs protein to help you grow. The amount of protein in one serving of a food is shown here (point). You need this much protein (demonstrate 100%) for a whole day, and this shows how much you get in one serving of a food. The same is true for vitamins and minerals, which your body needs to stay healthy (demonstrate). So, the Nutrition Computer shows you how many calories, protein, vitamins, and minerals are in one serving of a food (point to each).

Now, let's look at the pictures again. (Repeat procedure for 3 slides and generalization task.)

Subject _____

Age _____

Date Tested _____

(Engage child in conversation until rapport has been established.)

Give Orientation.

FOOD 1

-Pretend that it's Saturday morning and you're watching TV. A commercial for _____ comes on. At the end of the commercial you see this picture.

(Slide 1 and voice overlay by person running projector)

-What do you think that slide was trying to tell you? (What did you see?)

-Do you remember how many calories _____ has?

(Show child figure)

-Here's a figure like the picture you just saw. Push this knob to show me how much protein _____ has.

-Do you remember what the percentage was? (What the number was) _____ %

-Push this knob to show how much vitamins _____ has.

-Do you remember what percentage that is? (what number) _____ %

Push this knob to show how much minerals _____ has.

-Do you remember what percentage that is? (what number) _____ %

-Is _____ good for you?

Yes
No
?

-How can you tell from the picture?

FOOD 2

-That was really helpful. Now pretend you just saw a commercial about _____. At the end of the commercial you see this picture.

(Slide 2 and voice overlay)

-Do you remember how many calories _____ has?

(present figure)

-Move this knob to show me how much protein _____ has

-Do you remember what the percentage was? (number) _____ %

-Move this knob to show me how many vitamins _____ has.

-Do you remember what the percentage was? (number) _____ %

-Push this knob to show me how many minerals _____ has.

-Do you remember what the percentage was? (number) _____ %

-Is _____ a good food for you?

yes _____

no _____

? _____

-How can you tell from the picture?

FOOD 3

-Thank you. Now let's pretend that you just saw a commercial for _____. At the end of the commercial you see this picture.

(slide 3 and voice overlay)

Do you remember how many calories _____ has?

(present figure)

-Push this knob to show me how much protein _____ has.

-Do you remember what the percentage was? (number) _____ %

-Push this knob to show me how many vitamins _____ has.

-Do you remember what the percentage was? (number) _____ %

-Move this knob to show how many minerals _____ has.

-Do you remember what the percentage was? (number) _____ %

-Is _____ good for you?

yes _____

no _____

? _____

-How can you tell from the picture?

GENERALIZATION TASK

-Thank you. Now let's look at a few more pictures. If you saw this (present picture 1) after a commercial, would you think the commercial was about a good food or a bad food?

good _____

bad _____

-Here are some more. Put the ones that you think are about foods that are good for you here, and the pictures for foods that are bad for your body here.

Good

Bad

Give Summary orientation, and repeat procedure without feedback.

PROTOCOL

Recorder notes child's name, age, birthdate, date tested, grade level, room number, and treatment condition: records answers to all questions.

Experimenter engages child in conversation until rapport has been established, and establishes that the child understands what a commercial is.

Orientation/Training Session

Experimenter says the following:

Pretend that you were watching TV and a commercial came on about some food. It talked about how good that food was for you. Then at the end of the commercial this little figure came on the screen (Show the child the model of the graphic). It tells you about the food you saw in the commercial. It tells you how many calories are in one serving of the food, how much protein the food has, and how many vitamins and minerals are in it.

Condition 1: The calories are shown by this number at the top.

Condition 2: The calories are shown by this line at the top. Your body needs calories for energy, but too many calories will make you fat.

This P stands for protein. You need protein to help your body grow. This whole box after the P shows how much protein you need each day. The stripes show how much protein is in one serving of the food you saw in the commercial. If the box were half full of stripes (demonstrate) then you could get half of the protein you need for a whole day by eating just one serving of that food. That food would be a good source of protein, and very good for you. If there were just one or a few stripes, then the food would not have very much protein in it, and you would have to eat a lot of that food to get the protein you need.

This V stands for vitamins. You need vitamins to keep you healthy and to grow. The box shows how many vitamins you need each day, and the number of stripes shows you how many vitamins are in one serving of the food that you saw in the commercial. A lot of stripes would mean that the food has a lot of vitamins. A few stripes would mean that the food was not a good source of vitamins.

This M stands for minerals, which you also need to stay healthy. It works the same way as the protein and the vitamins. The box shows a full day's need for minerals, and the number of stripes and the percentage number show you how many minerals are in the food that the commercial was about.

So that's how it works. This figure comes on the TV after a commercial about food, and it tells you how many calories (point) protein, vitamins and minerals there are in one serving of the food that the commercial was about.

The slides are then presented. As a slide comes on, the projectionist says "See how many protein, vitamins and minerals there are in a _____ caloric serving of this food." The slide remains on the screen while the experimenter says:

Do you remember how many calories _____ has?

(Hand child the model)

See if you can make this match the picture on the screen. How many calories does it show? (If child responds incorrectly, the experimenter points this out and guides the child in making the two displays match)

Now, how much protein does it have? (Feedback).

How many vitamins does it have? (Feedback).

How many minerals does it have? (Feedback).

Do you think that _____ is good for your body? Why?

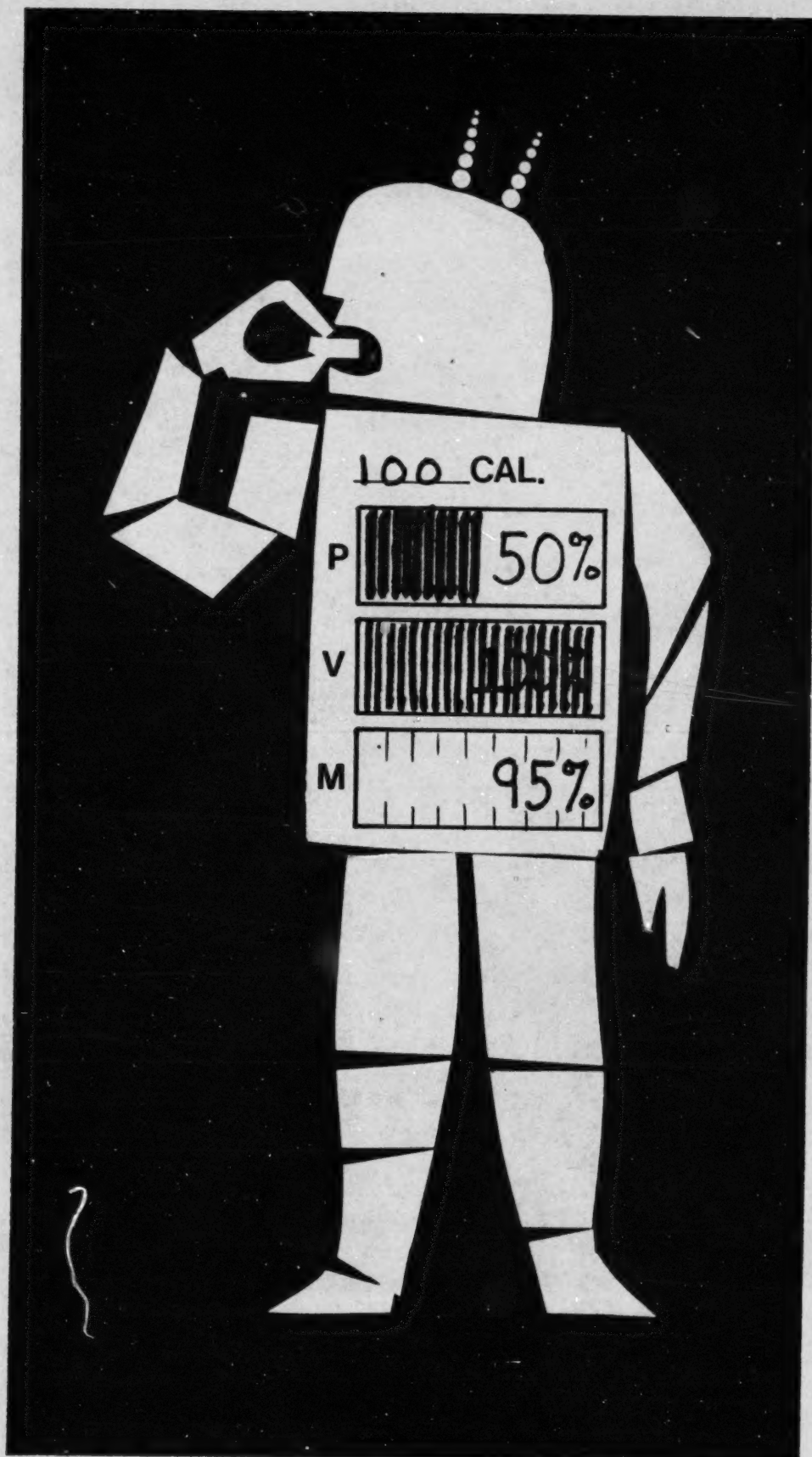
The slide is then changed and the procedure repeated for the two remaining foods.

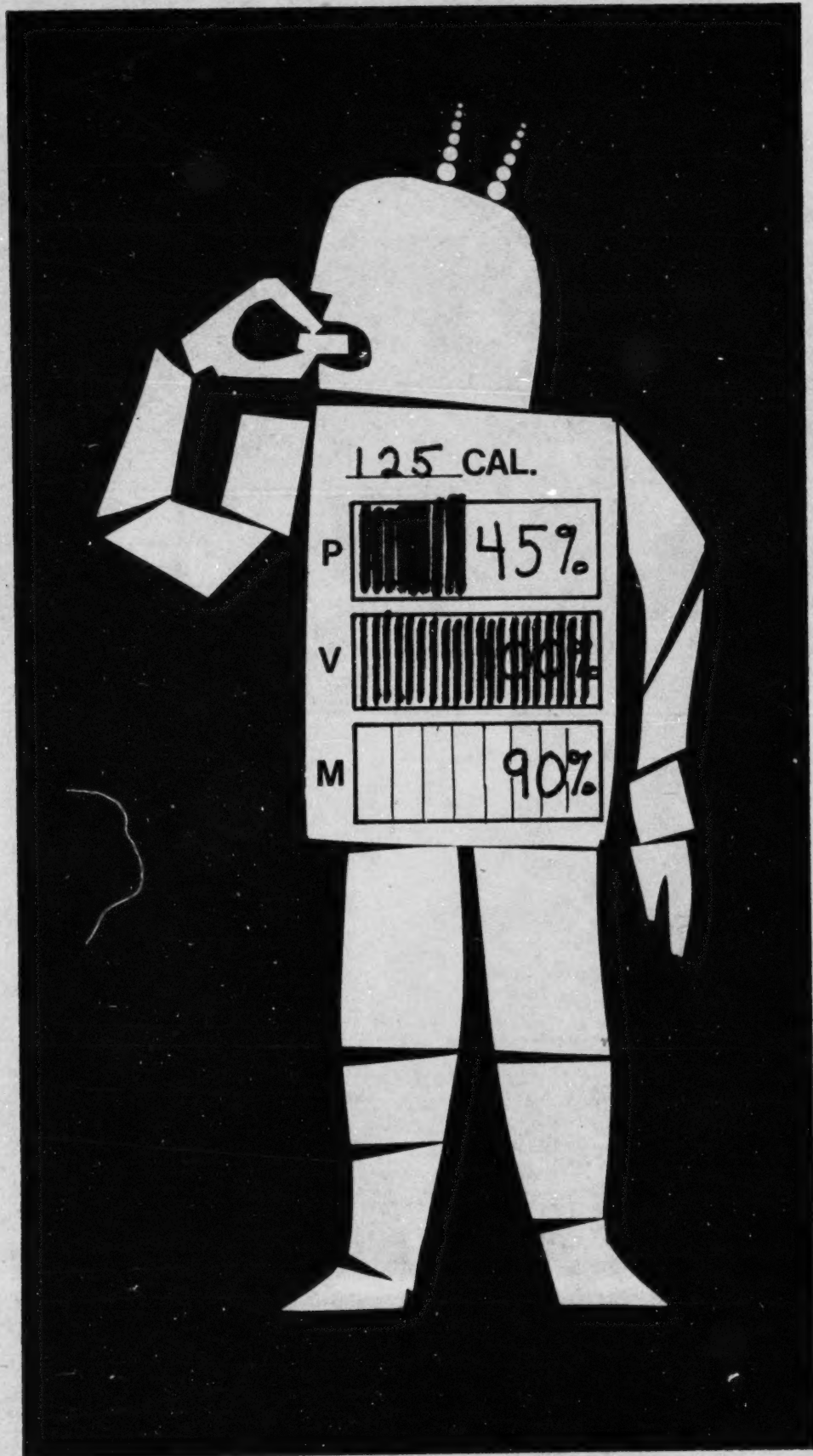
Generalization task: The experimenter says "If you saw this (present Picture I of the Generalization Set) this after a commercial would you think the commercial was about a good food for your body or a bad food for your body? How did you decide? (Feedback is given) This is repeated for all six pictures.

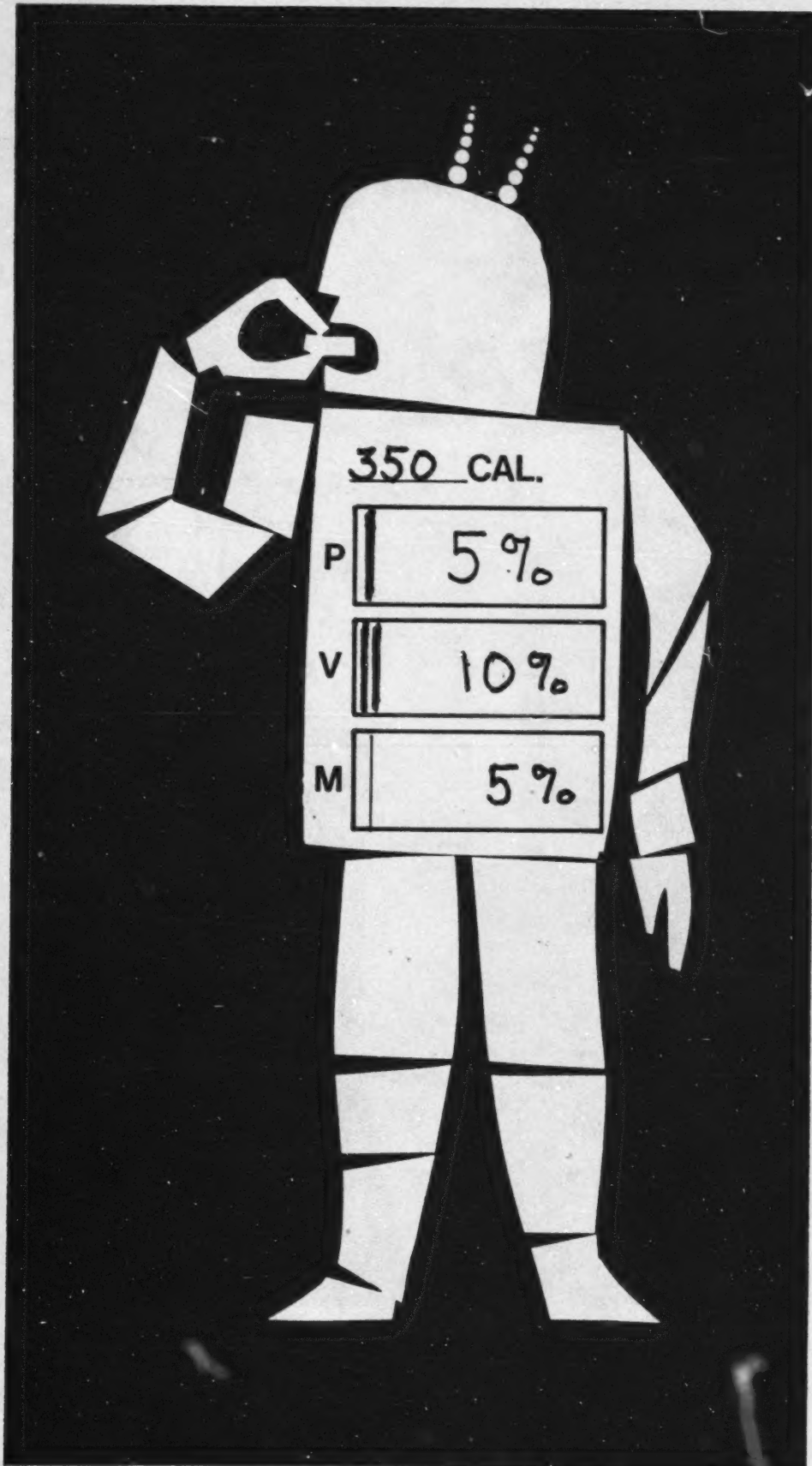
The child is then given a summary orientation which consists of the following:

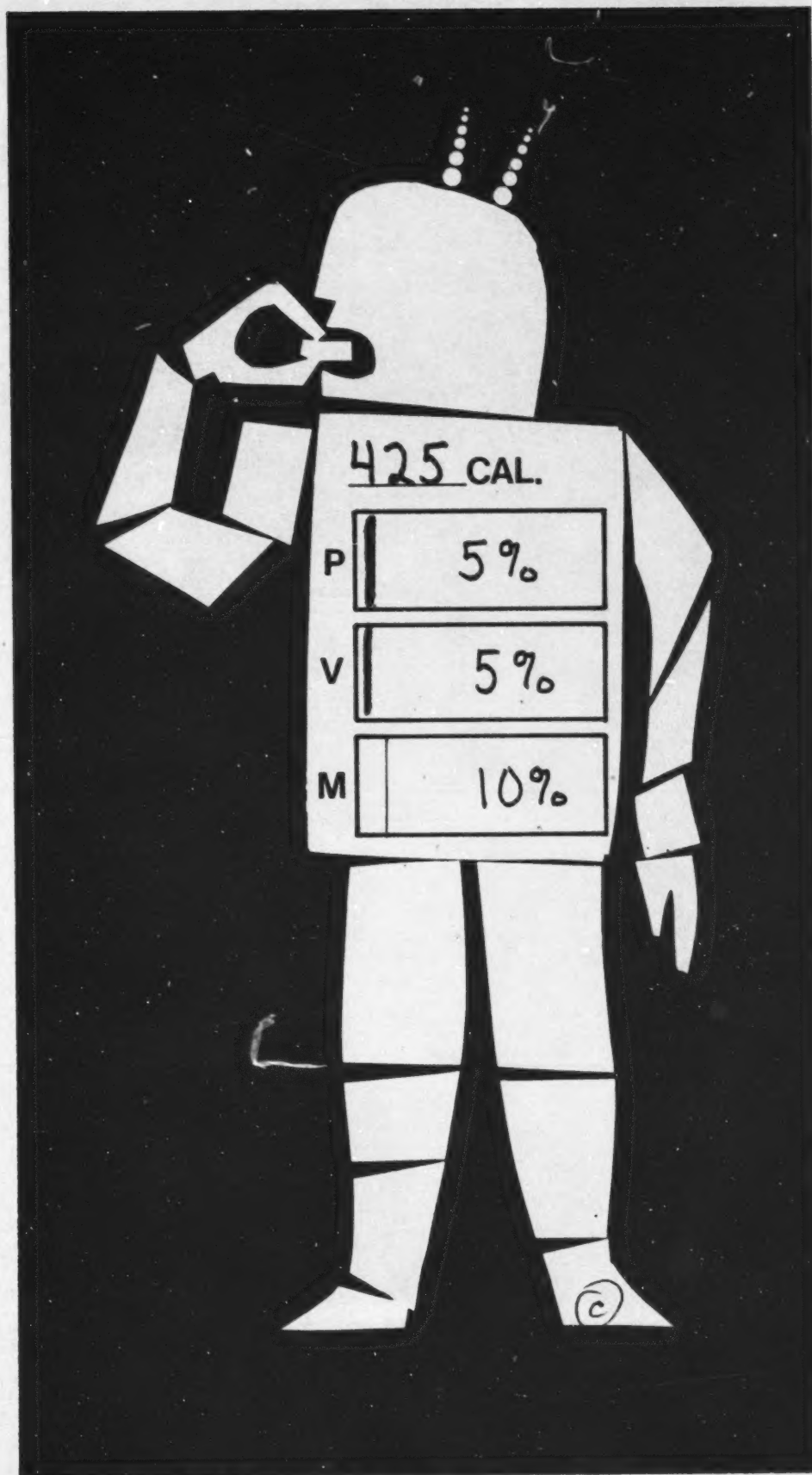
Now, let's look at this figure again. You remember that it shows the number of calories in one serving of a food here (point). Calories give you energy, but too many calories make you fat. Your body needs protein to help you grow. The amount of protein in one serving of a food is shown here (point). You need this much protein for a whole day, and this shows how much you get in one serving of a food. The same is true for vitamins and minerals, which your body needs to stay healthy. So, this figure shows you how many calories, protein, vitamins, and minerals are in one serving of a food. Now, let's look at the pictures again, but this time the pictures will only be on the screen for 5 seconds.

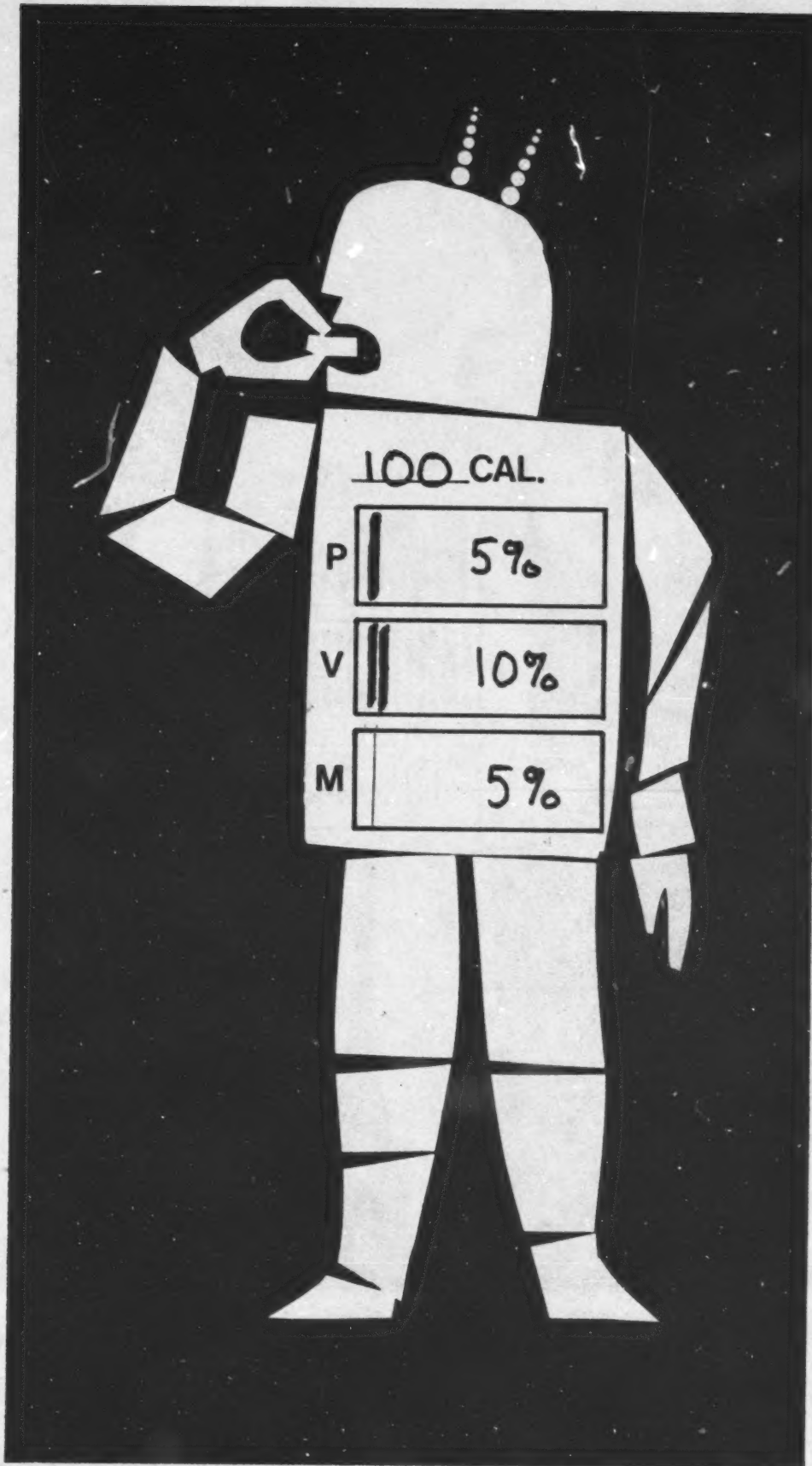
The procedure is then repeated from the showing of the slides, but this time no feedback is allowed.

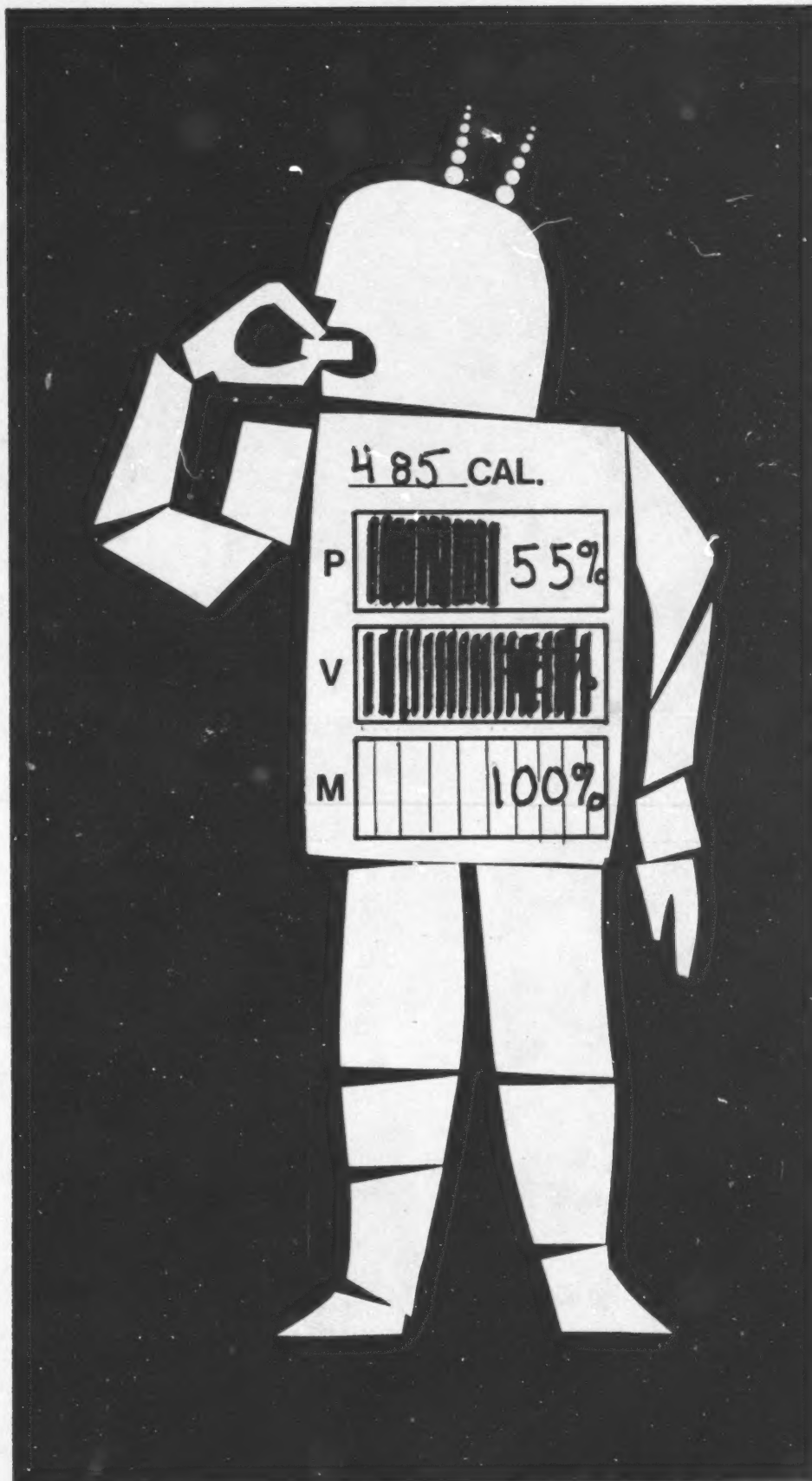


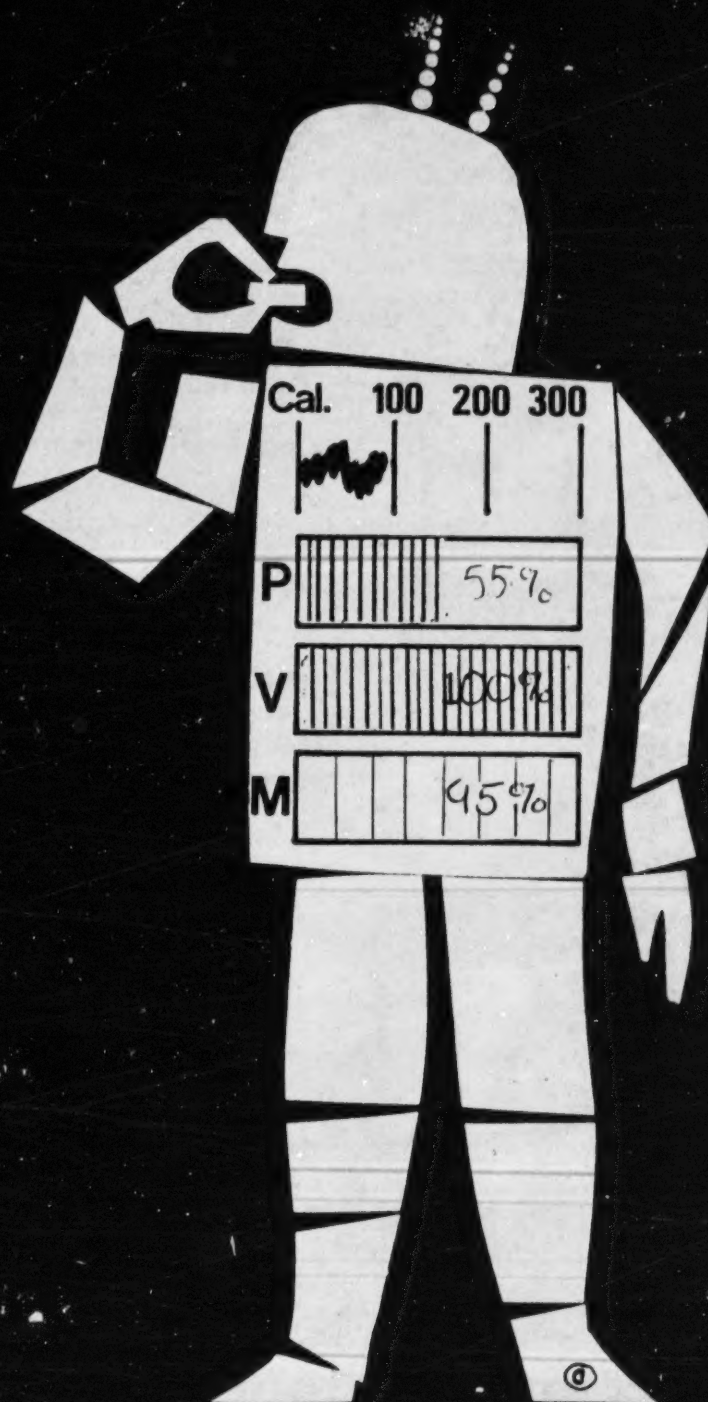


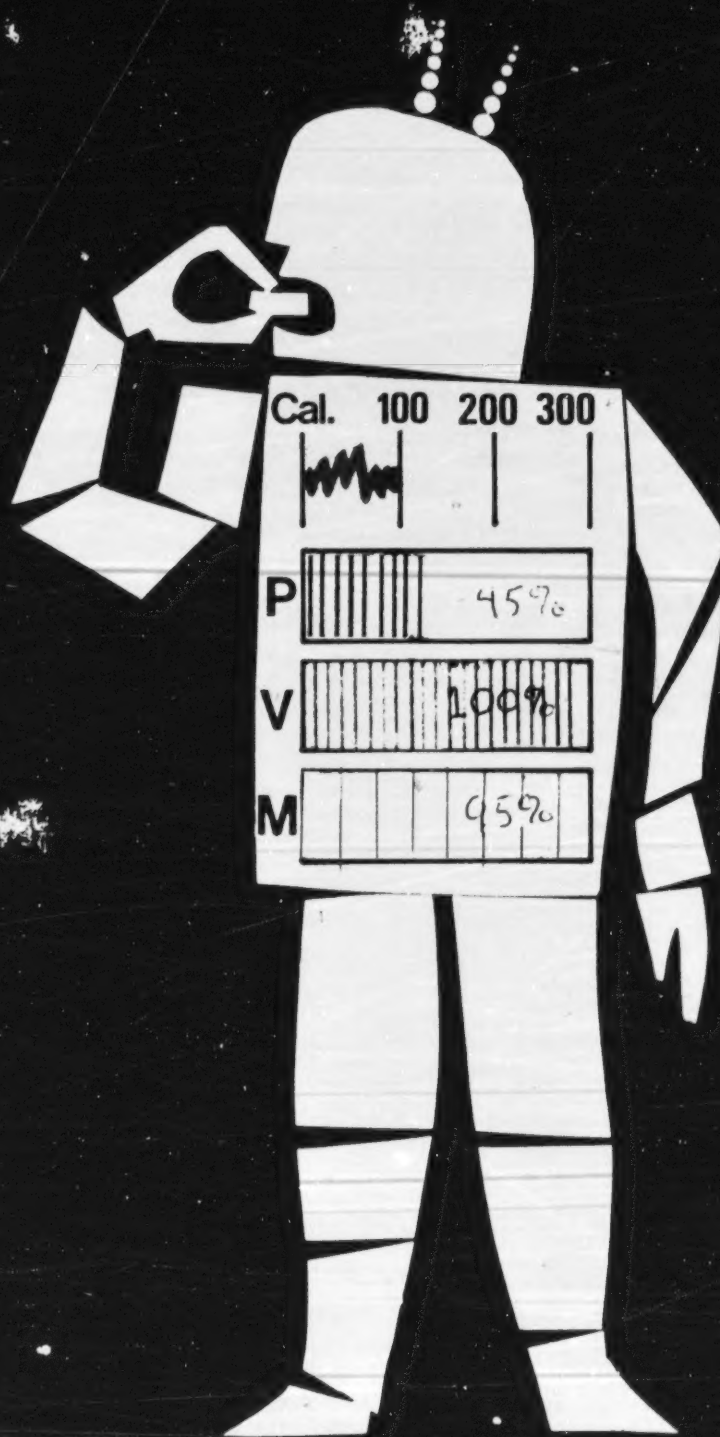


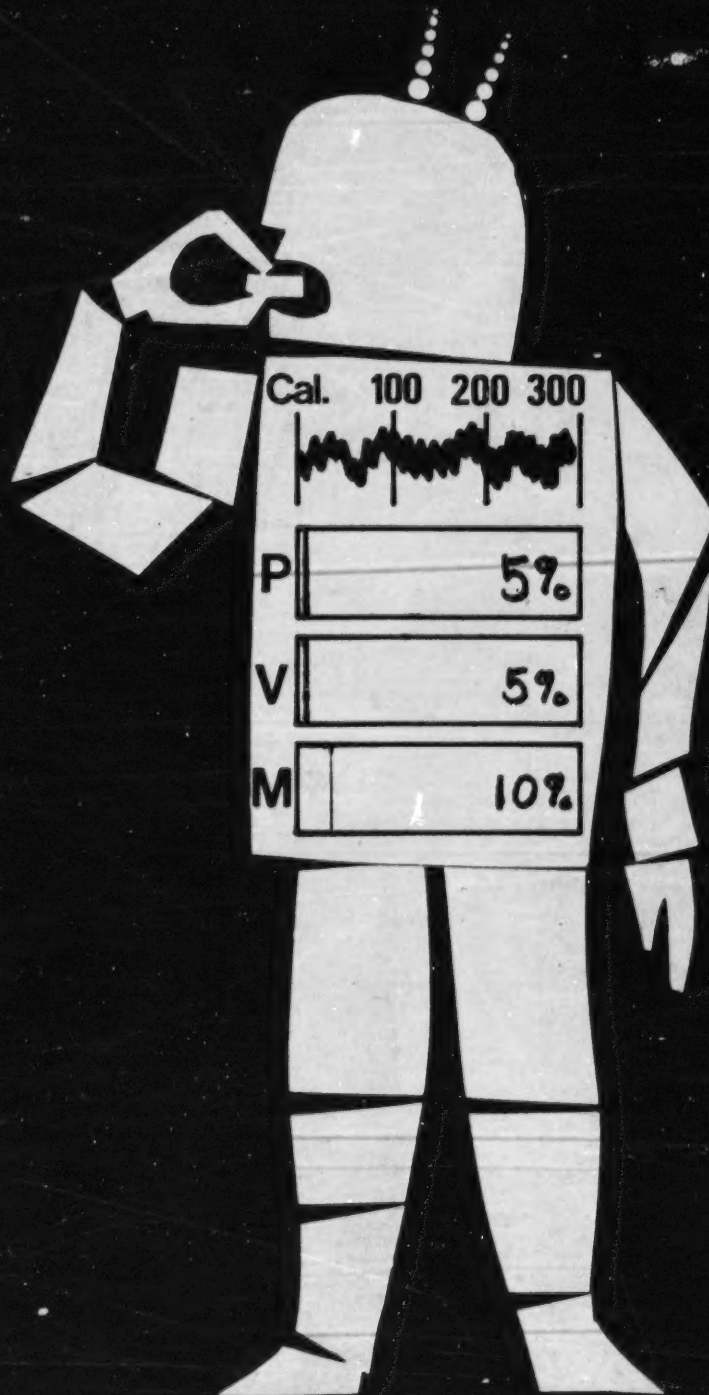


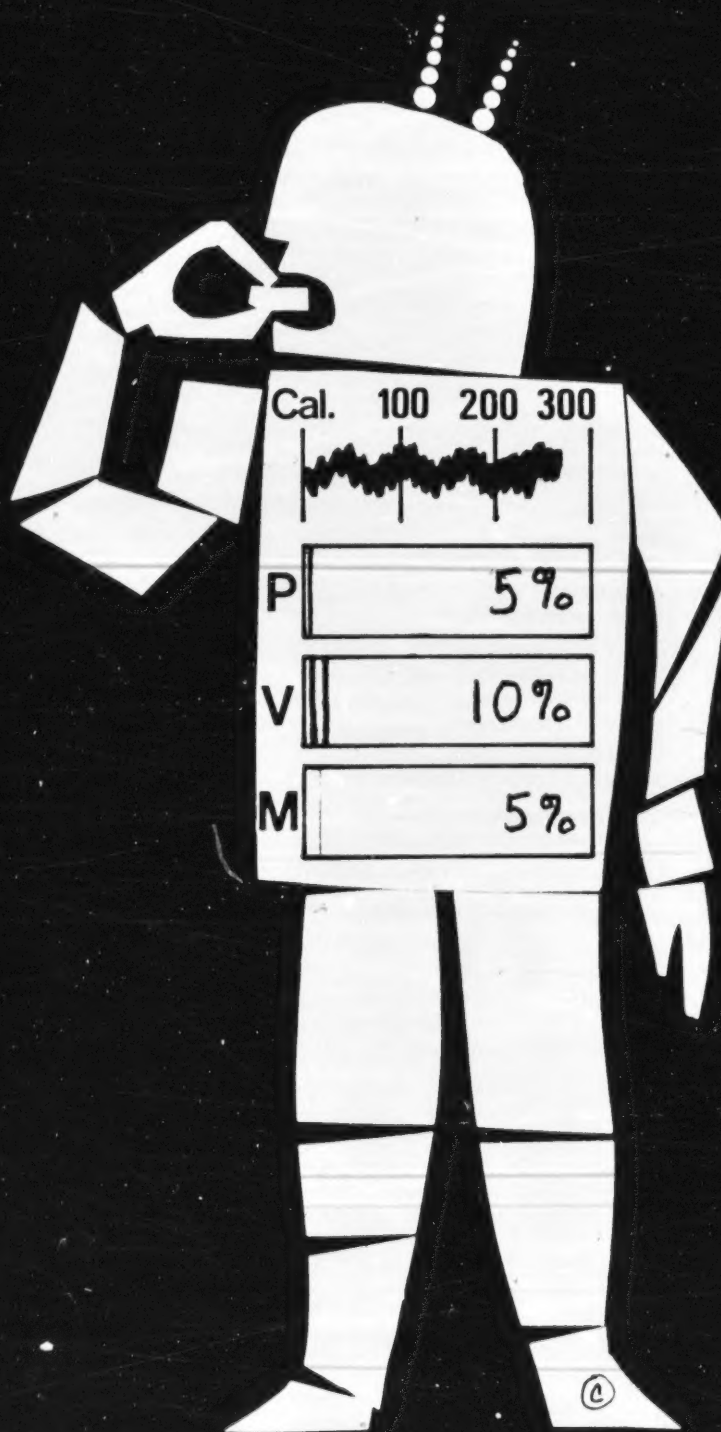


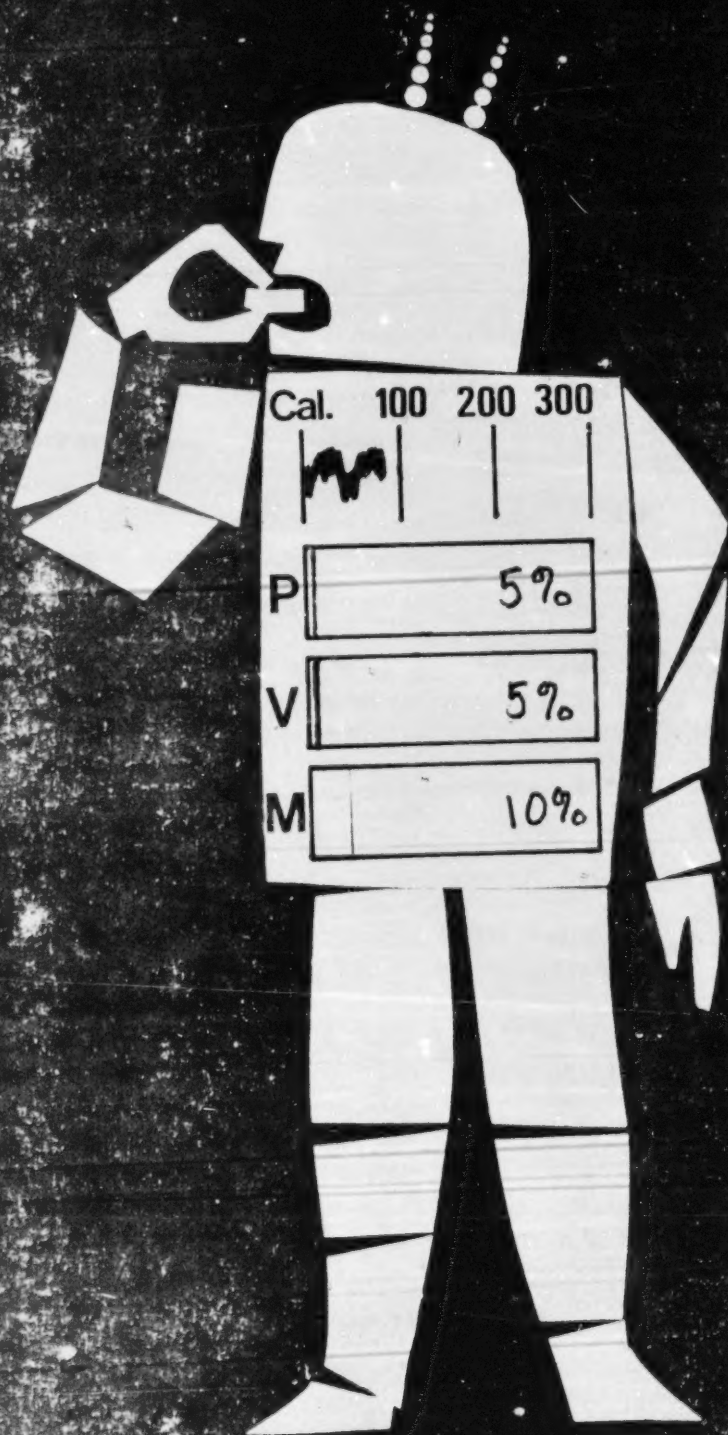


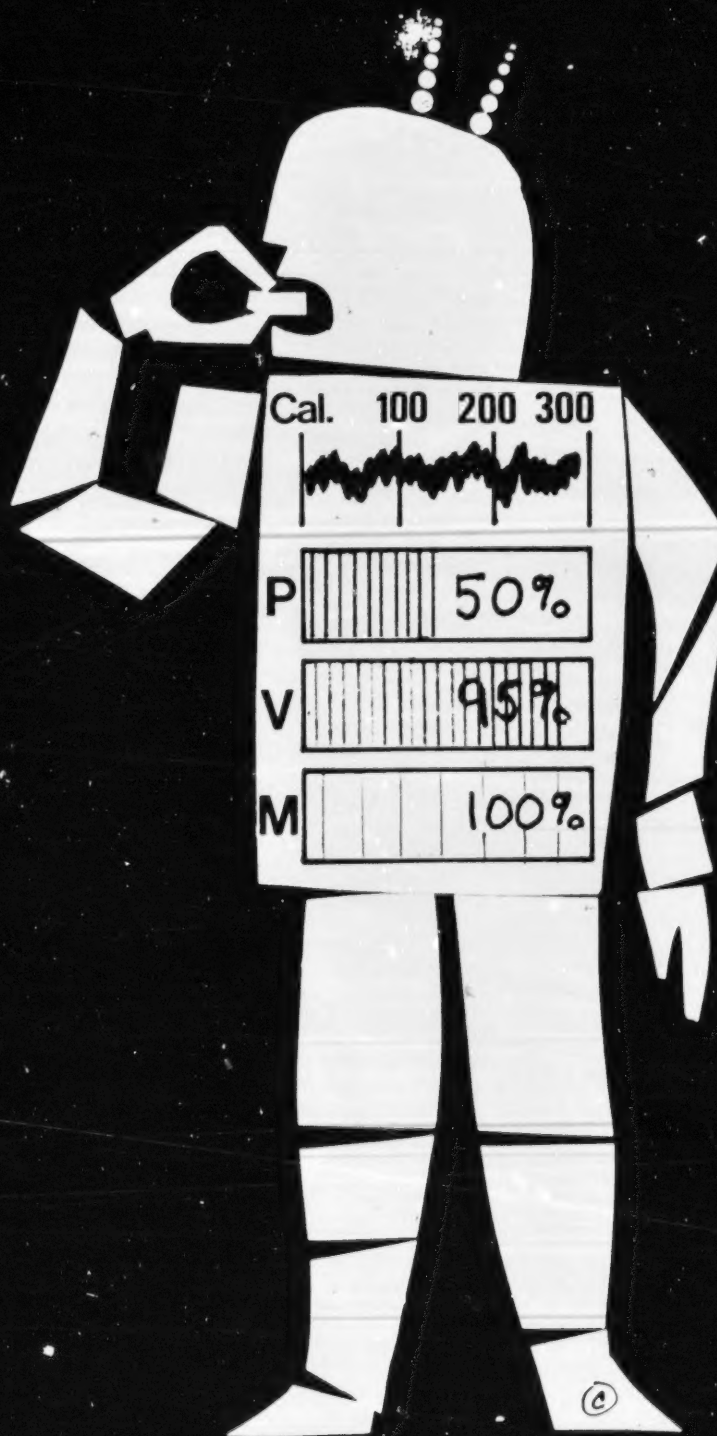


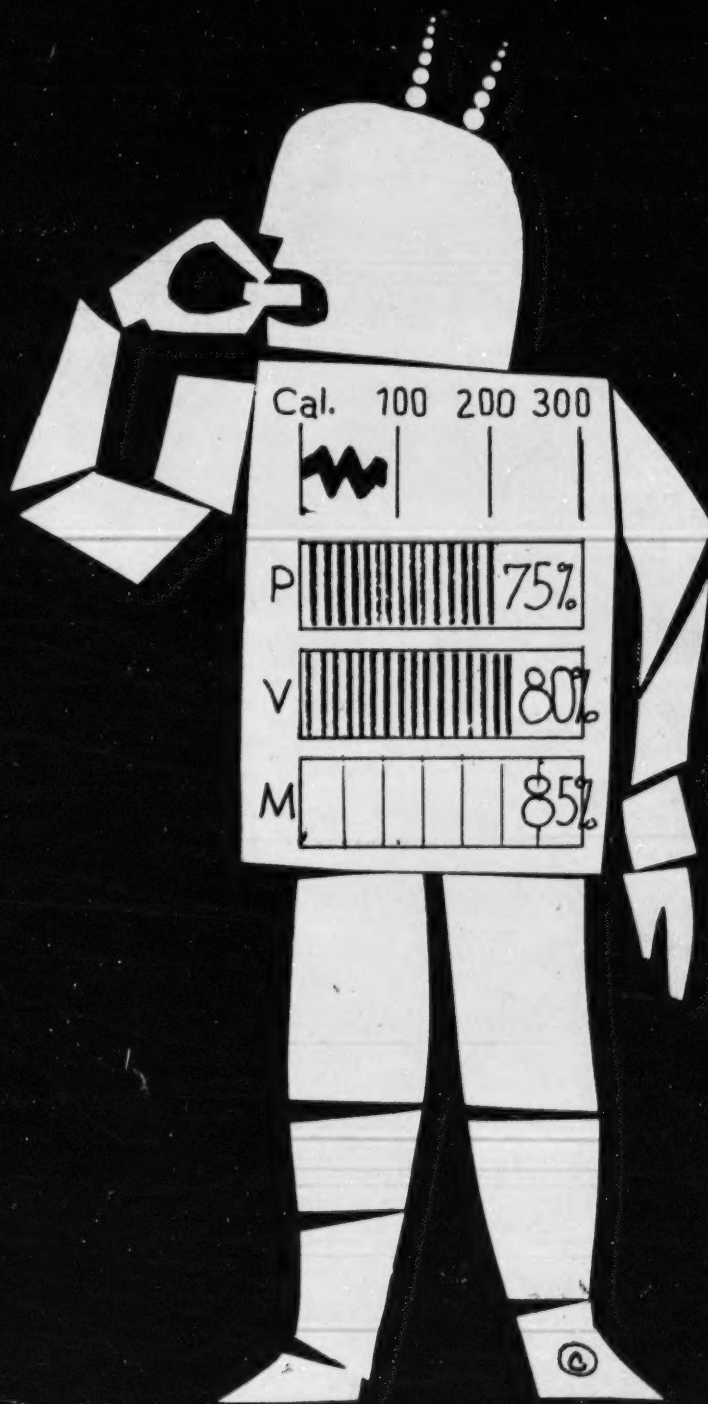


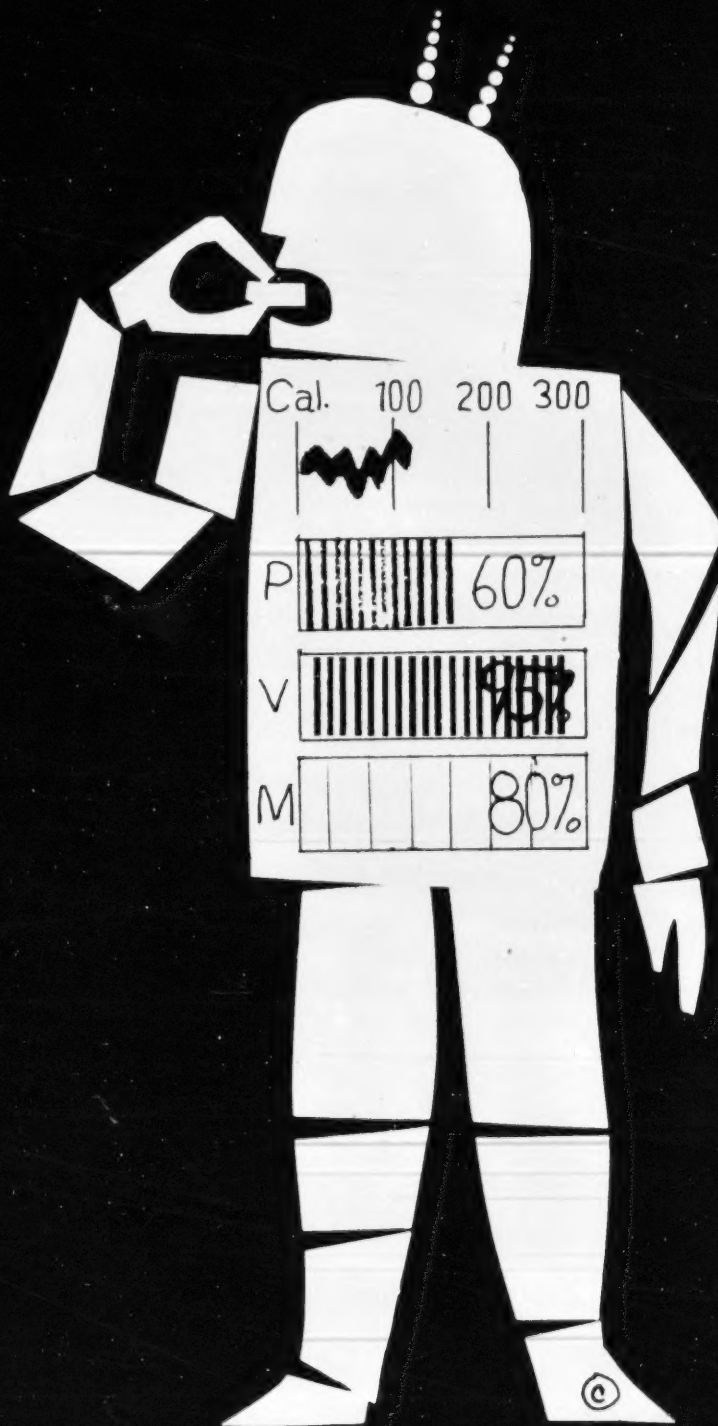


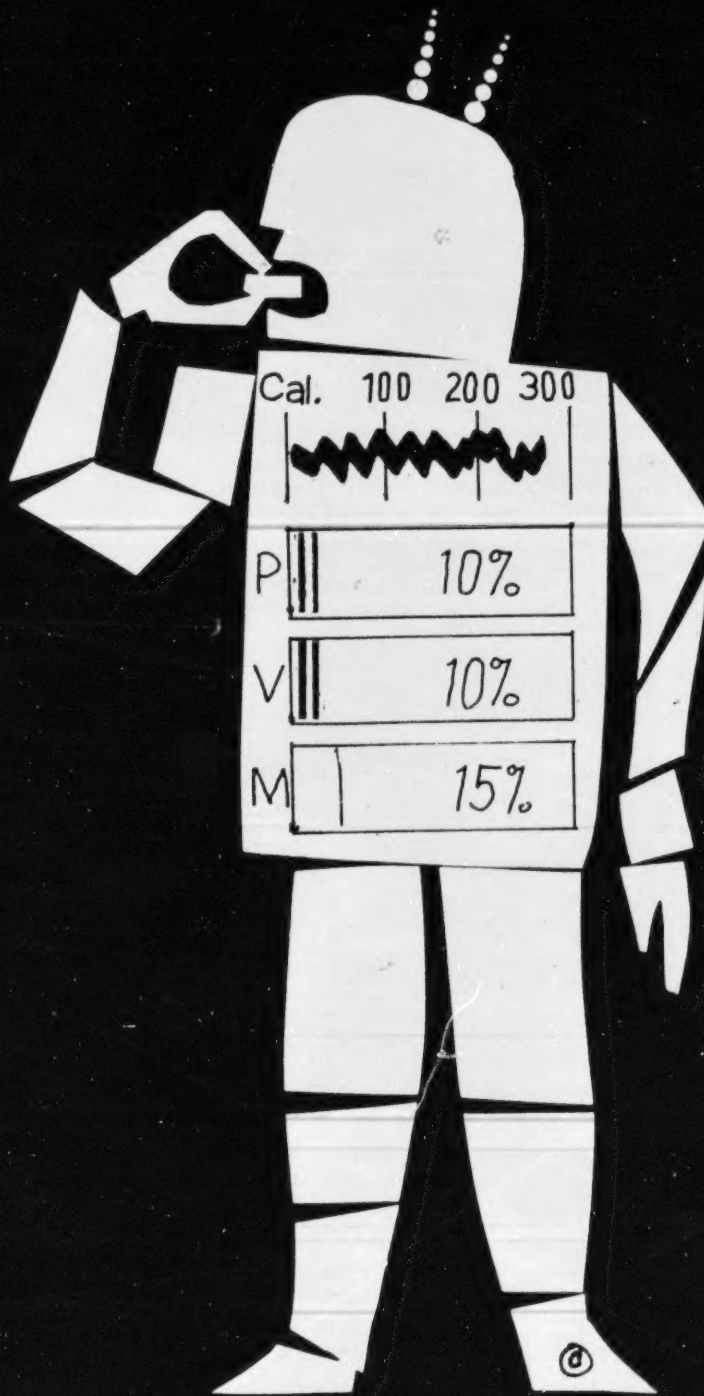


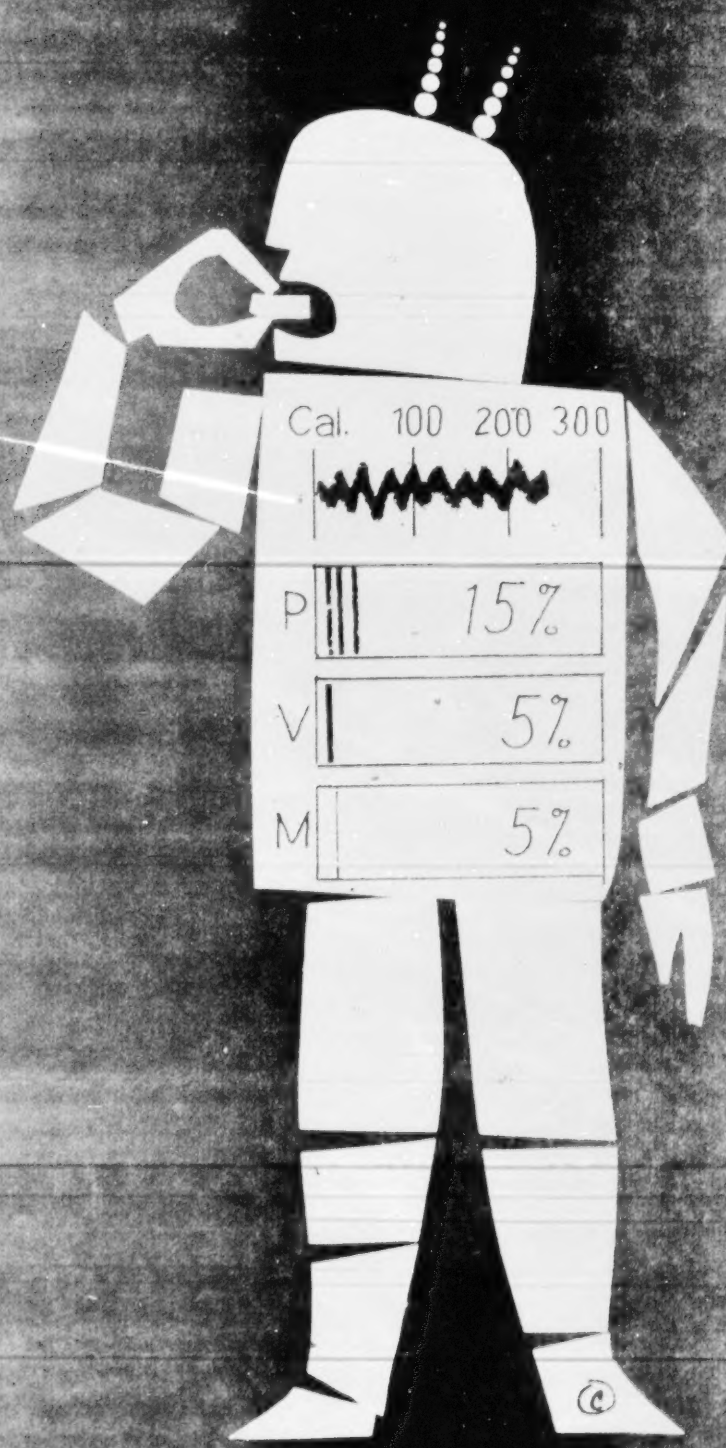


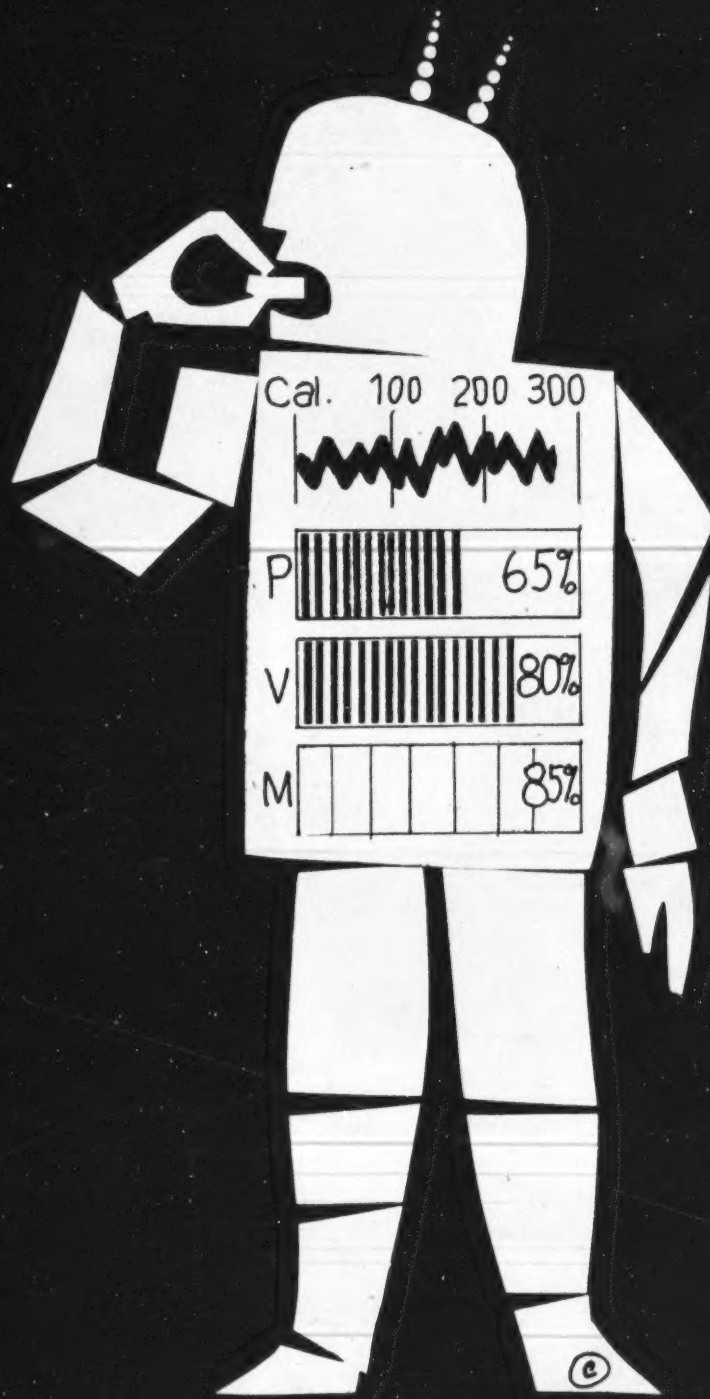


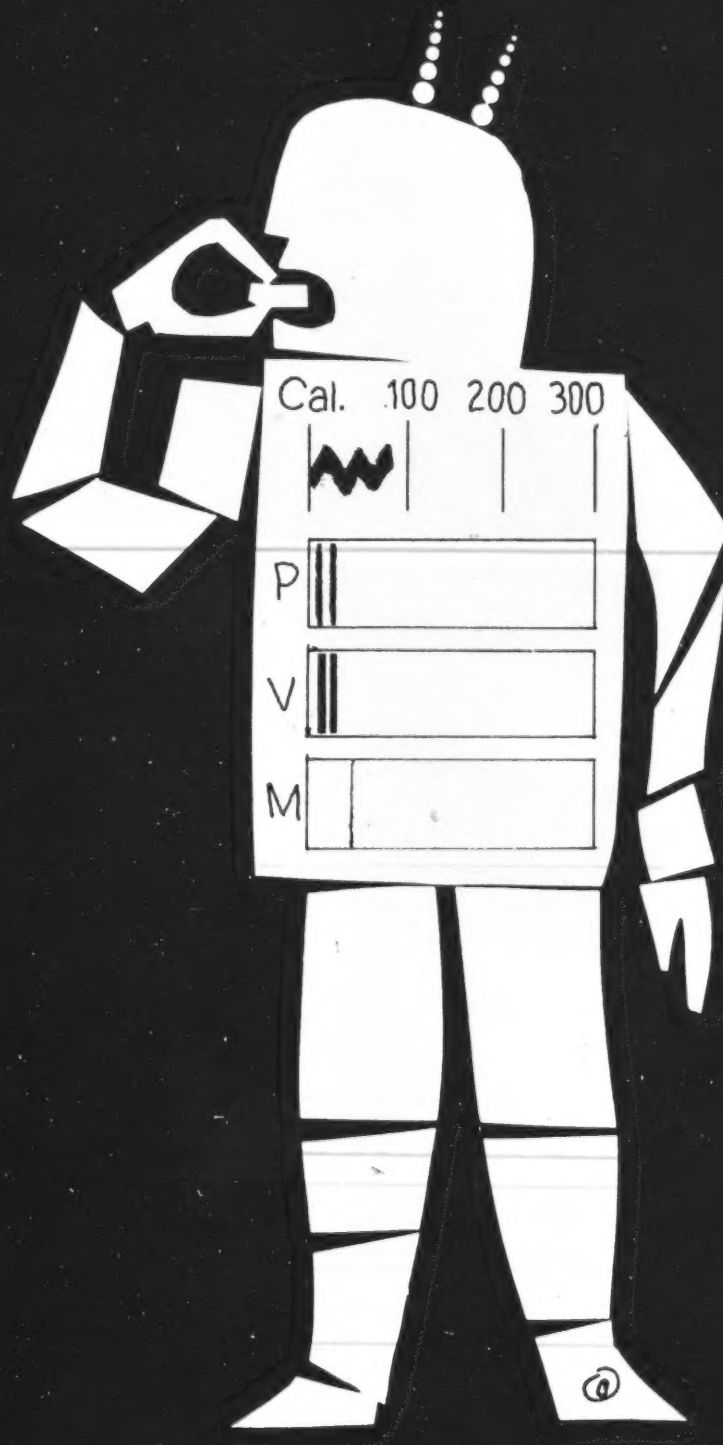


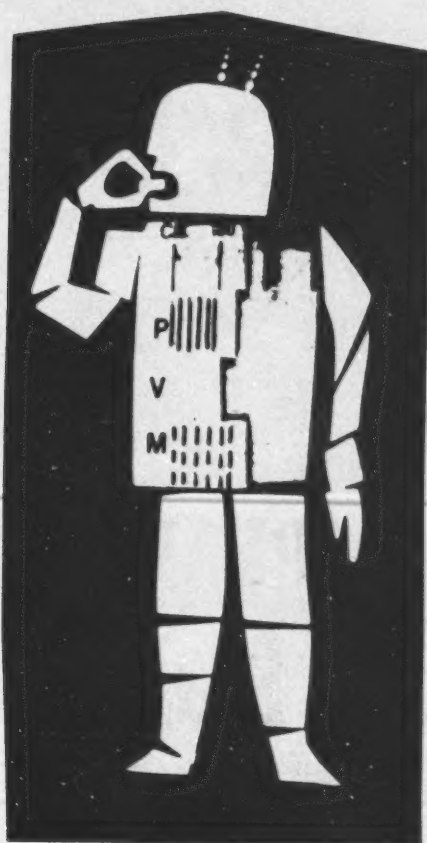












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Picture of wooden model
approximately 5"x9"x1/4"
with slidable panels for
protein, vitamin, mineral
and calorie representations.